

Sounder Stations Access Study

Report

September 2012

Prepared for:



Prepared by the URS Team

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Chapter 1: Introduction

Why did we conduct this planning study?

In November 1996, voters approved the Sound Transit *Sound Move* (Sound Transit 1996) funding package, a comprehensive regional transit plan that comprises nearly 100 interrelated capital and service projects. This plan includes a mix of transportation improvements such as high-occupancy vehicle (HOV) lane access improvements, Sound Transit Express (ST Express) bus routes, Sounder Commuter Rail, and Link light rail. Sounder Commuter Rail service runs 82 miles from Everett to Tacoma/Lakewood. Sounder service between Seattle and Tacoma started in 2000, and service between Everett and Seattle began in 2003. Over 10,500 commuters use this service daily during the peak commute times and it is anticipated that this number will continue to grow.

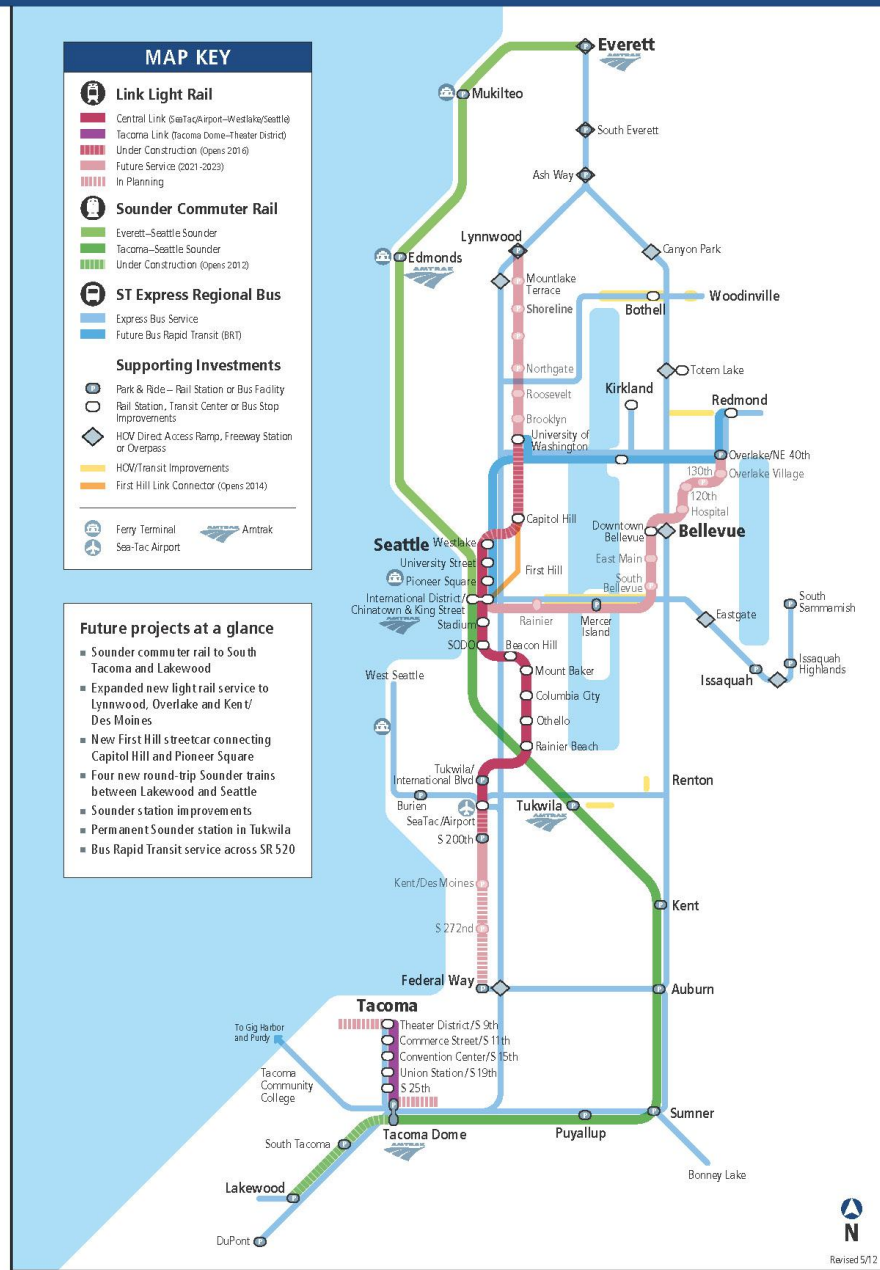
In November 2008, voters approved ST2, which provides immediate and long-term funding for significant express bus growth, as well as launching major light rail, commuter rail, and station access expansions. Figure 1-1 shows Sound Transit's current service and future projects. Part of the funding package is targeted to improve access to the regional transit system at eight Sounder Commuter Rail stations: Mukilteo, Kent, Auburn, Sumner, Puyallup, Tacoma Dome, South Tacoma, and Lakewood. Riders, local jurisdictions, and the community have all expressed the desire for investment in improved station access. Concerns include:

- Parking lots that operate at or above capacity
- Impacts on local streets, neighborhoods, and downtowns
- Reducing greenhouse gas emissions by encouraging walking, biking, transit connection, and carpooling to Sounder stations

As a response to these concerns and inquiries, Sound Transit has advanced the concept of station access solutions. This Sounder Stations Access Study implements this approach by addressing how much demand can be accommodated by modes other than by autos parking at the stations. This report will determine how much shift away from single-occupancy vehicles could occur by 2030 if capital investments are made to improve access via alternative modes, such as walking or bicycling, while acknowledging stations needing additional parking. The Sounder Stations Access Study was started in 2010 and concluded in 2012; during this time service changes to connecting bus routes were implemented and are described in Chapter 2 of this report in *italics*.

Sounder trains provide weekday peak service between Tacoma and Seattle (which will be extended to Lakewood in 2012) and between Everett and Seattle. Sounder also serves select major weekend events such as Mariners, Seahawks, and Sounders FC games. Event service typically includes one train in each direction between Tacoma and Seattle and between Everett and Seattle. Currently, free parking is provided at Sounder stations except for King Street Station, which does not provide a Sound Transit parking lot. At the time of this study, adult fares were between \$2.75 and \$4.75, depending on the length of the trip.

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What will you find in this report?

The Sounder Stations Access Study consisted of seven phases:

- Phase 1 – Project Management Plan (on file with Sound Transit)
- Phase 2 – Inventory of Existing Conditions/Data Collection (Chapter 2)
- Phase 3 – Station Access Deficiency Assessment (Chapter 2)
- Phase 4 – Evaluation Criteria (Chapter 3)
- Phase 5 – Alternatives Analysis (Chapter 4)
- Phase 6 – Station Access Improvements Plan (Chapter 5)
- Phase 7 – Support Staff Recommendation

For the most part, stations are considered separately in terms of their access-related data, challenges, and improvement plans—there are no comparisons drawn between stations. This is due in part to the differences between stations (for example, the station-area population and employment/housing mix), and also to keep a constant, un-biased review for each station.

All maps and aerial photographs presented in this report are oriented such that north is at the top of the figure.

Chapter 2: Inventory of Existing Conditions/Data Collection and Access Deficiency Assessment (Phases 2 and 3)

This chapter contains the products of efforts conducted for Phases 2 and 3 of the Sounder Stations Access Study. For Phase 2, the following existing plans and policy documents were reviewed, including:

- ST2 Plan
- ST2: A Mass Transit Guide
- ST Parking Pricing Study (2009)
- Origin-destination information
- ST 2009 Fare Payment Survey
- Local jurisdictions' comprehensive plans, zoning ordinances, downtown plans, transportation and non-motorized plans, and corridor plans or studies

Other components of Phase 2 include data collection for each station, rider surveys, and public outreach through a series of open houses and stakeholder interviews. Through these efforts, the existing conditions or the “state” of each Sounder Station, as well as the issues or opportunities at each Sounder Station, are described in this chapter. A pedestrian and bicycle assessment and a public open house summary also are included.

An access deficiency assessment prepared for Phase 3 for each of the eight Sounder stations analyzed for the project is also included in this chapter. To develop the deficiency assessment, ridership demand and access modes were analyzed by station based on station-specific design, such as parking capacity, feeder transit capacity, bicycle capacity and station-area characteristics such as pedestrian and bicycle connectivity, major barriers (e.g., freeways, railroad tracks) and broader access opportunities and constraints (primarily for the automobile).

Evaluating each station's access performance involved a three-step process:

1. Assessing current and forecast demand by mode and comparing to industry averages
2. Identifying capacity constraints from data collected in Phase 2
3. Identifying deficiencies in capacity to accommodate forecast demand

How have we reached the community?

Beginning in 2010, Sound Transit reached out to the city governments in the cities where the eight stations in this study are located. Sound Transit staff met with local staff and elected officials to brief them on the study. Sound Transit reviewed the scope of the study, the

schedule and the opportunities for public input with staff and elected officials from each of the host cities.

In addition, Sound Transit staff attended various regional group meetings, such as the Valley Mayors group and the South County Area Transportation Board, to brief elected officials on the study. Sound Transit has continued to provide briefings and respond to requests for information on the Access Study (see Chapter 4).

Sound Transit hosted a series of public open house events in 2011, to secure feedback to help inform possible future Sound Transit investments at the eight stations. The objectives of the open houses were to generate awareness, encourage public participation, and solicit feedback. A total of six open houses were held in the following cities:

- Kent – Wednesday, January 26
- Auburn – Thursday, January 27
- Sumner – Wednesday, January 19
- Puyallup – Thursday, January 20
- Tacoma – Tuesday, January 18
- Lakewood – Tuesday, January 25

The format of the open house events featured six information stations;

- Station One: Basic information about Sound Transit; funding, routes, ridership, budget and future area investments
- Station Two: Overview about the Access Study and its goals, desired outcomes and timelines
- Station Three: An aerial map with information about the existing conditions at each station and opportunity to discuss potential improvements
- Station Four: Collecting feedback about how people travel to the stations
- Station Five: Opportunity for Sound Transit staff and public to engage and interact
- Station Six: Bike Station and other third-party/partner organizations (Pierce County Metro, etc.)

Rider surveys were also collected at the study stations in early November 2010 (Appendix C – Winter 2011 Public Outreach and Open House Summary). Additional outreach was conducted in fall 2011 and winter 2012 (Chapters 4, 5, and Appendix G).

What is the state of each Sounder station?

This chapter presents information for each of the eight Sounder stations collected in fall 2010, from north (Mukilteo) to south (Lakewood). The state of each station is reported in terms of a brief inventory of the facility, transit connections, the local jurisdiction's relevant goals and policies for the station area, mode splits, rider surveys, field observations, proposed future developments in the vicinity of the station, and detailed traffic counts. Transit connections are classified using the following wait times: good (5-10 minutes), acceptable (10-20 minutes), or poor (less than 5 minutes, greater than 20 minutes, or does not connect with all trains).

The modeling was based on the transit service in place at the time of the rider surveys (November 2010), which is described in this chapter. However, later changes in transit service are noted in *italics* in each station's summary section.

The modes from which riders accessed morning trains are described in detail, and based on field observations and rider surveys (Appendix B). In the afternoon, Sounder provides seven southbound trains from Seattle to Tacoma and two reverse direction trains, departing from 3:15 to 6:15 p.m. There are four northbound trains from Seattle to Everett in the afternoons departing from 4:05 to 5:35 p.m. In addition to Sounder service, Amtrak Rail Plus provides one northbound train and one southbound train between Everett and Seattle in both the morning and afternoon. See Tables 2-1 and 2-2 for schedules that were in place at the time of the study.

Table 2-1: Sounder Everett-Seattle Schedules (weekdays only)

Southbound					
Train		Everett Station	Mukilteo Station	Edmonds Station	Seattle
Sounder	1701	5:45 a.m.	5:56 a.m.	6:11 a.m.	6:44 a.m.
Sounder	1703	6:15 a.m.	6:26 a.m.	6:41 a.m.	7:14 a.m.
Sounder	1705	6:45 a.m.	6:56 a.m.	7:11 a.m.	7:44 a.m.
Sounder	1707	7:15 a.m.	7:26 a.m.	7:41 a.m.	8:14 a.m.
Northbound					
Train		Seattle	Edmonds Station	Mukilteo Station	Everett Station
Sounder	1700	4:05 p.m.	4:32 p.m.	4:47 p.m.	5:04 p.m.
Sounder	1702	4:33 p.m.	5:00 p.m.	5:15 p.m.	5:32 p.m.
Sounder	1704	5:05 p.m.	5:32 p.m.	5:47 p.m.	6:04 p.m.
Sounder	1706	5:35 p.m.	6:02 p.m.	6:17 p.m.	6:34 p.m.

Table 2-2: Sounder Tacoma-Seattle Schedules (weekdays only)

Northbound							
Train	Tacoma	Puyallup Station	Sumner Station	Auburn Station	Kent Station	Tukwila Station	Seattle
1500	4:55 a.m.	5:07 a.m.	5:12 a.m.	5:20 a.m.	5:27 a.m.	5:34 a.m.	5:54 a.m.
1502	5:35 a.m.	5:47 a.m.	5:52 a.m.	6:01 a.m.	6:08 a.m.	6:15 a.m.	6:34 a.m.
1504	6:00 a.m.	6:12 a.m.	6:17 a.m.	6:26 a.m.	6:33 a.m.	6:40 a.m.	6:59 a.m.
1506	6:25 a.m.	6:37 a.m.	6:42 a.m.	6:51 a.m.	6:58 a.m.	7:05 a.m.	7:24 a.m.
1508	6:50 a.m.	7:02 a.m.	7:07 a.m.	7:16 a.m.	7:23 a.m.	7:30 a.m.	7:49 a.m.
1510	7:20 a.m.	7:32 a.m.	7:37 a.m.	7:45 a.m.	7:52 a.m.	7:59 a.m.	8:19 a.m.
1512	8:00 a.m.	8:12 a.m.	8:17 a.m.	8:25 a.m.	8:32 a.m.	8:39 a.m.	8:59 a.m.
1514	4:25 p.m.	4:37 p.m.	4:42 p.m.	4:50 p.m.	4:57 p.m.	5:04 p.m.	5:23 p.m.
1516	5:00 p.m.	5:12 p.m.	5:17 p.m.	5:25 p.m.	5:32 p.m.	5:39 p.m.	5:58 p.m.
Southbound							
Train	Seattle	Tukwila Station	Kent Station	Auburn Station	Sumner Station	Puyallup Station	Tacoma
1501	6:10 a.m.	6:22 a.m.	6:29 a.m.	6:36 a.m.	6:45 a.m.	6:49 a.m.	7:08 a.m.
1503	6:50 a.m.	7:02 a.m.	7:09 a.m.	7:16 a.m.	7:25 a.m.	7:29 a.m.	7:48 a.m.
1505	3:15 p.m.	3:27 p.m.	3:34 p.m.	3:41 p.m.	3:50 p.m.	3:54 p.m.	4:14 p.m.
1507	3:50 p.m.	4:02 p.m.	4:09 p.m.	4:16 p.m.	4:25 p.m.	4:29 p.m.	4:49 p.m.
1509	4:20 p.m.	4:32 p.m.	4:39 p.m.	4:46 p.m.	4:56 p.m.	5:00 p.m.	5:19 p.m.
1511	4:45 p.m.	4:57 p.m.	5:04 p.m.	5:11 p.m.	5:21 p.m.	5:25 p.m.	5:44 p.m.
1513	5:12 p.m.	5:24 p.m.	5:31 p.m.	5:38 p.m.	5:48 p.m.	5:52 p.m.	6:11 p.m.
1515	5:40 p.m.	5:52 p.m.	5:59 p.m.	6:06 p.m.	6:16 p.m.	6:20 p.m.	6:39 p.m.
1517	6:15 p.m.	6:27 p.m.	6:34 p.m.	6:41 p.m.	6:41 p.m.	6:54 p.m.	7:14 p.m.

Sounder has two bicycle tie-downs per car. Two additional bikes are allowed on each car that must be held in place securely by the cyclist. Sound Transit policy allows up to four bicycles on each of the cars per train, for a total of 28 bicycles on Tacoma-Seattle trains (seven cars), and a total of 16 bicycles on Everett-Seattle trains (four cars).

Mukilteo

The Mukilteo Sounder Station is located near the waterfront and Washington State Ferry (WSF) terminal, and is designed to serve riders coming from the local area in and around Mukilteo and the Mukilteo-Clinton ferry.

Sounder trains depart each weekday morning from Mukilteo southbound to Seattle at 5:56, 6:26, 6:56, and 7:26 a.m. Figure 2-1 shows the location of Mukilteo Station.

Figure 2-1: Mukilteo Station (920 1st Street)



There are 63 surface parking stalls, six bicycle rack spaces and no bicycle lockers. There is space available for up to eight vehicles at any one time for passenger drop-off or pick-up.

Transit Connections

The Mukilteo Station is served by Community Transit (CT) local and regional routes, and a local Everett Transit route. The WSF system and Island Transit on Whidbey Island provide opportunities for inter-modal travel through this station. All of these connections are located at the WSF terminal, approximately 1,000 feet northwest of the station. Changes in transit service made since 2010 are noted in *italics*.

CT Route 113 provides all-day service between Mukilteo and Lynnwood, approximately every 20 minutes in both directions. This route provides reasonable access to Sounder, particularly on the northern end of the route; for example, from the Harbor Point area and north to the WSF terminal. There are transfer connections for all four afternoon Sounder trips and two of the morning trips. In the morning, the bus arrives 13 minutes before the second train, 18 minutes before the third train, and 10 minutes before the fourth train. In the afternoon, the bus is scheduled to depart eight minutes after the arrival of the train. *The southern part of CT Route 113 has been truncated by eliminating the part of the route between the Ash Way Park-and-Ride and Lynnwood.*

CT Route 417 provides peak period, peak direction service between the Mukilteo ferry terminal and downtown Seattle, competing with Sounder. Route 417's scheduled travel times are almost 20 minutes longer than Sounder (approximately 68 minutes vs. Sounder's 48 minutes) to the south end of downtown Seattle. *Service has been reduced on CT Route 417, with morning trips reduced from five to four and afternoon trips reduced from seven to five.*

Island Transit Route 1 provides all-day, bi-directional service on Whidbey Island between Oak Harbor and the Clinton ferry dock. There are six morning and six afternoon trips during peak commute times and service every 60 minutes at midday with "at the boat" loading on the dock. Whidbey Island has fairly robust transit, carpool, and vanpool usage, making this a potentially significant market although it is outside of the Puget Sound Regional Transit Authority district.

Everett Transit Route 70 and CT Routes 190 and 880/885 provide peak-period-only service away from Mukilteo in the morning and toward Mukilteo in the afternoon. Therefore, these routes have limited potential for transfers to and from Sounder. *CT Route 190 has been eliminated.*

Origin and Destination

Thirty of the passengers surveyed who boarded at Mukilteo Station one morning during the first week of November 2010 returned surveys. Table 2-3 shows the city of origin for the passengers surveyed. Of these 30 passengers, 80% disembarked at King Street Station.

Table 2-3: Mukilteo Passenger City of Origin

City	Boardings	% of Boardings
Clinton	4	13
Everett	7	23
Langley	4	13
Mukilteo	12	40
Other	3	10
TOTAL	30	100

Rider Survey Information

Table 2-4 summarizes the station arrival access mode data from the passenger surveys. Approximately two-thirds of the passengers who returned surveys drove themselves to the station on that day.

Table 2-4: Mukilteo Sounder Access

Mode	% of Arrivals
Drive	66
Drop-off	7
Carpool	0
Feeder Transit	24
Bike	0
Walk	0
Other/Sounder Reverse	3
TOTAL	100

Station Area Arrival Access Mode

Arrival mode information was gathered by direct observation at the station on the morning of November 2, 2010 from approximately 4:30 to 7:30 a.m., when the last train left the station. A total of 109 arriving passengers were observed. Table 2-5 summarizes the station arrival mode split data.

Approximately half of the arriving passengers drove themselves to the station on that day. The substantial number of passengers arriving on foot at the Sounder station were observed coming directly from the Mukilteo-Clinton ferry terminal.

Table 2-5: Mukilteo Arrival Mode

Mode	Arrivals	% of Arrivals
Auto	57	52.3
Feeder Transit	0	0.0
Bicycle	1	0.9
Drop-off	10	9.2
Walk	41	37.6
Train	0	0.0
TOTAL	109	100.0

Observations in the Field

In general, passenger arrivals were evenly spaced across the four southbound trains. The ferry and Sounder schedules were generally well-coordinated. The station parking area was about 90% full following the departure of the fourth and last southbound train.

Traffic Counts

One intersection near the station (1st Street at the station parking entrance; see Figure 2-1) was counted between 6:30 and 8:30 a.m. on November 8, 2010. At this intersection, the peak hour for total arriving traffic occurred between 7:25 and 8:25 a.m., when 61 vehicles entered the intersection at about one per minute, with the majority (42) turning from southbound 1st Street into the Sounder station parking/drop-off area. Volumes are very low at this intersection because three of the four legs function effectively as driveways.

Jurisdiction Goals and Policies

The Mukilteo Station is designated as Commercial with a Mixed Use Overlay by the City's Comprehensive Plan and is zoned Waterfront Mixed Use.

Mukilteo Comprehensive Plan. Mukilteo revised its Comprehensive Plan in 2009. The original plan was adopted in 1986 and amended in 1995 to address Growth Management Act (GMA) requirements (City of Mukilteo 2010). The Mukilteo Commuter Rail Station is located on the Burlington Northern Santa Fe Railway (BNSF) mainline along the Puget Sound shoreline. The City adopted its plan for the shoreline area as a waterfront mixed use zoning district and is expecting re-development of the waterfront area within the next ten years, anchored by a multi-modal transportation terminal for ferry, bus, and commuter rail riders. Per the GMA, Mukilteo is scheduled to update its Comprehensive Plan by June 30, 2015.

The commuter rail station is an integral piece of the multi-modal transportation terminal. The first phase of construction on the commuter rail station has been completed by Sound Transit.

WSF issued a Draft Environmental Impact Statement (EIS) in January 2012 on three options to improve or relocate the ferry terminal.

Specific Comprehensive Plan policies that support inter-modal connectivity to Mukilteo's waterfront and multi-modal terminal include:

- *GD2: Encourage City entryways, commercial development, and redevelopment near the urban waterfront to reflect the waterfront atmosphere of the City.*
- *GD5: Provide public infrastructure and services which are cost-effective, efficient, and sensitive to the environment; and which balance the use of private vehicles, cars/vanpools, public transit and non-motorized modes of transportation, including a comprehensive system of bicycle and pedestrian routes, for the movement of people and goods.*
- *TR2: Concepts within the March 1995 Mukilteo Multimodal/Inter-Modal Terminal and Access Study and the Programmatic Environmental Impact Statement (EIS) prepared by the City of Mukilteo and the Central Waterfront Alternative or any amended master plan adopted by the Mukilteo City Council should be used as the basis for all planning activities related to the proposed Multimodal/Inter-Modal Terminal in downtown Mukilteo. The City should aggressively pursue an alternative route to replace Mukilteo Speedway as the primary vehicular access to the Mukilteo waterfront and the Washington State Ferries terminal in a cooperative effort with WSDOT [Washington State Department of Transportation] and the City of Everett.*
- *TR3: Development of the Multimodal/Intermodal terminal and redevelopment of the Tank Farm site, should employ the following urban design techniques: a network of public paths, a waterfront promenade, a chain of waterfront parks, recreational opportunities such as a new marina or visitor dock and boat launch, new mixed use/commercial opportunities, public amenities downtown (e.g. benches, street lights, water fountains, etc.), and pedestrian oriented streetscapes.*
- *TR4: Design of the Multimodal/Intermodal terminal shall remove ferry parking and queuing lanes from SR 525 and shall encourage the use of public transit, high occupancy vehicles (HOV), and pedestrian and bicycle access over private automobile access. The waterfront shall be preserved to the maximum extent possible for development and uses that take advantage of and benefit from being located on the waterfront and which improve on the positive characteristics of the waterfront. Surface parking lots are not such a use and shall be minimized.*
- *TR23: Convenient and secure bicycle parking should be provided in activity and transportation centers to accommodate Multimodal/Inter-Modal connections.*

Mukilteo Downtown Business District Subarea Plan. The Downtown Business District Subarea Plan was adopted in 2009 (City of Mukilteo 2009). Specific non-motorized projects identified in the Mukilteo Plan include:

- *REC-11: Construct a footbridge between Mukilteo Lane and the waterfront at Park Avenue or Loveland Avenue. A bridge from Old Town to the waterfront was a high priority among work session participants. While this is an expensive project, such a bridge might be coordinated with redevelopment and transit improvements on the waterfront.*

Mukilteo Bicycle, Pedestrian and Trails Plan. The Mukilteo Bicycle, Pedestrian and Trails Plan was adopted in 2009 (City of Mukilteo 2008). Specific non-motorized projects identified in the Mukilteo Plan include:

- Waterfront Promenade Multipurpose Trail, Lighthouse Park to Tank Farm
- Waterfront Pedestrian Bridge from 2nd Street to waterfront (same as REC-11 above)

Mukilteo Waterfront Redevelopment. In 1995, the City of Mukilteo City Council adopted the Multimodal/Intermodal Terminal and Access Study, developed by an interagency committee charged with addressing the growing needs of the Washington State Ferry System, the proposed Sound Transit commuter rail station and selling the U.S. Air Force Tank Farm property as surplus (City of Mukilteo 1995). The study provided a plan for:

- Expanding and relocating the WSF terminal, increasing capacity for ferry loading and moving it off of State Route (SR) 525
- Placing a commuter rail platform and a 120-vehicle park-and-ride lot (which was reduced to 80 spaces when the waterfront mixed-use zoning was adopted in 2000, unless parking is provided in a garage or a lot that can be used for shared parking)
- Transferring passengers from other modes, such as bus, taxi, van pool or drop-off
- A multimodal/intermodal station that allows passengers to transfer modes easily by separating vehicles and pedestrians through the use of a second story walkway system
- A marina/visitor moorage, boat launch, and associated parking and services
- Reclaiming public access to the waterfront through a series of parks connected by a pedestrian promenade that will form a mile-long loop trail when the Tank Farm site is connected with the Mukilteo Lighthouse Park, and which also sets aside 20% of the redeveloped area as open space
- Redeveloping Front Street into a pedestrian-oriented waterfront commercial area that emphasizes water-enjoyment activities and allows for mixed use on the south side of Front Street (outside the 200-foot shoreline jurisdiction) where views will not be obstructed

Future Pedestrian and Bicycle Access to Multimodal/Intermodal Terminal. Sound Transit has constructed Phase I of a new commuter rail platform near the central waterfront intermodal site. This project was evaluated and defined in the 1999 Draft and Final EIS for the Everett-Seattle Commuter Rail Project by Sound Transit and the U.S. Department of Transportation, Federal Transit Administration. The completed facility will consist of two platforms serving travel both toward Everett and Seattle, a pedestrian bridge over the tracks connecting the platforms, and associated parking. Phase II to complete the facility is scheduled to begin construction in 2013.

Currently, access is proposed to the terminal site from the existing SR 525 on the north side of the BNSF railroad tracks. The multimodal/intermodal terminal project will be designed to allow for future access from an alternate waterfront route when this new roadway is constructed. The Comprehensive Plan further acknowledges that the SR 525 street bridge just south of the Mukilteo ferry terminal is the responsibility of WSDOT, and that the bridge is functionally obsolete, does not have adequate facilities for bicyclists and pedestrians, and needs to be replaced (although funding at the state level has not yet been made available).

Commute Trip Reduction. Under the Washington State Commute Trip Reduction (CTR) Efficiency Act of 2006, the City is required to administer a CTR program for all employers in Mukilteo with at least 100 employees arriving at a single location during the peak morning commute hours. The goal of CTR is to reduce the number of single-occupancy vehicles (SOVs) traveling during the peak commute hours. CTR incentives include providing transit subsidies, preferential parking for carpools, bicycle lockers and showering facilities, and flexible work schedules.

The specific Mukilteo Comprehensive Plan policy that supports CTR measures is:

- *TR29: The City of Mukilteo should support Community Transit with the adoption of a Commute Trip Reduction Plan for major employers in the city and shall coordinate and work cooperatively with Community Transit, Everett Transit, Snohomish County and other cities in the Southwest Urban Growth Area to implement the Commute Trip Reduction Plans.*

Access Deficiency Assessment

Station Description and Major Barriers:

- Mukilteo Station is located near the Mukilteo Ferry terminal, north of the BNSF rail line from greater Mukilteo. The SR 525 bridge links Mukilteo and the ferry terminal area, providing the only pedestrian and bicycle connection between Mukilteo and the station.
- The existing rail line is a direct barrier to pedestrian and bicycle access to the station from the south.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- Sounder Passenger Access Survey¹ indicates no pedestrian or bicycle trips originating within the 15-minute travel shed.
- 160 employed residents are located within a 15-minute walk and almost 3,700 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit A.

Feeder Transit Service Limitations (*changes in feeder transit service made since 2010 are in italics*):

- CT Route 417 competes with Sounder service by providing peak period/direction service between the WSF terminal and downtown Seattle.
- CT Route 113 and Island Transit Route 1 provide transfer connections with Sounder. *The southern portion of CT Route 113 between the Ash Way Park-and-Ride and Lynnwood has been eliminated.*
- Everett Transit Route 70 and CT Routes 190 and 880/885 have limited potential for transfers to and from Sounder due to their travel direction. *CT Route 190 has been eliminated.*
- There is no off-peak service to compliment Sounder service.

Vehicle Access and Network Constraints:

- There are no level-of-service issues in the morning peak at intersections that serve the station.
- The afternoon Sounder trains are scheduled to arrive with enough time for riders to catch the next departing ferry as walk-on passengers. However, this results in a conflict for Sounder park-and-ride users as the only access road to the park-and-ride is through the same intersection as all ferry loading/unloading vehicles. WSF is currently evaluating alternatives to replace or relocate the Mukilteo Ferry Terminal. The build alternatives under consideration are designed to reduce conflicts, congestion, and safety concerns for pedestrians, bicyclists and vehicles; as well as to offer better and safer connections to transit and commuter rail through the connecting second-story bridge structures.

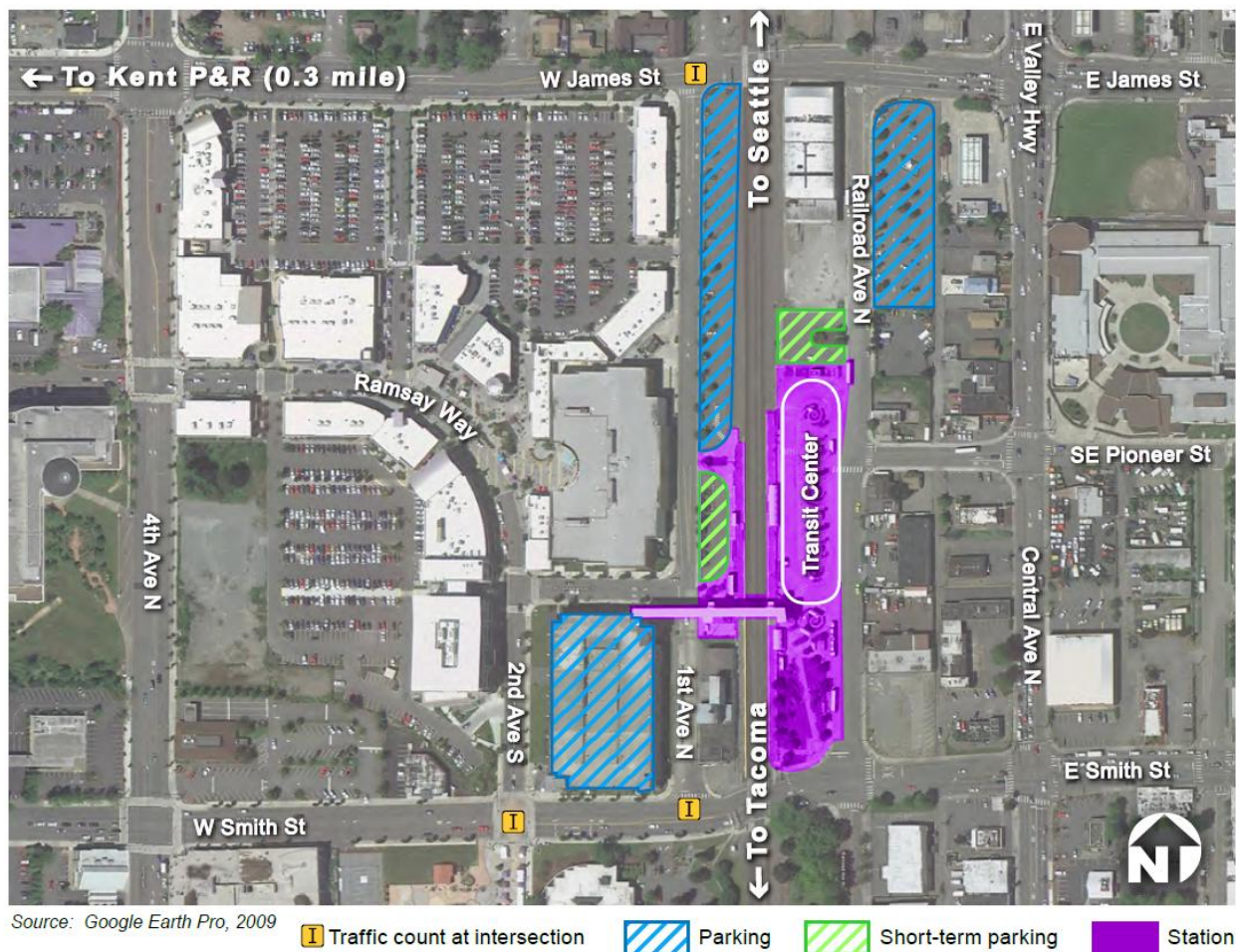
¹ Of the ~1,200 surveys returned, 466 were geo-coded to an accuracy level high enough to use for this part of the analysis. Of those 466, 217 were within the 15-minute travel shed for a station. Specific results of the Sounder Passenger Access Survey can be found beginning on page 2-6 and Appendix D.

Kent

The Kent Sounder Station is located in the northern part of downtown Kent, between the busy east-west arterials of W James Street and W Smith Street. It is one block west of Central Avenue, which is the primary north-south arterial in downtown Kent. It primarily serves riders who live east of the downtown area, as well as those who work near the station. The station also is a major transfer point for King County Metro bus service.

Sounder trains depart each weekday morning from Kent, northbound to Seattle at 5:27, 6:08, 6:33, 6:58, 7:23, 7:52, and 8:32 a.m., and southbound to Tacoma at 6:29 and 7:09 a.m. Figure 2-2 shows the location of Kent Station.

Figure 2-2: Kent Station (301 Railroad Avenue N)



There are 1,101 parking stalls (976 garage and 125 surface), eight bicycle rack spaces and 22 bicycle lockers with a 44-bicycle capacity available. The parking garage is open from 5:00 a.m. to 2:30 a.m. Monday through Friday, and from 6:00 a.m. to 2:30 a.m. on weekends and holidays. There is space available for up to 39 vehicles at any one time for passenger drop-off and pick-up.

Transit Connections

At Kent, a transit center is incorporated into the station on the east side of the commuter rail platforms. The Kent Station is served by ST Express bus routes and seventeen King County Metro bus routes. Some of the King County Metro routes will be discussed as groups because they operate or are scheduled together, which has transfer implications. Changes in transit service made since 2010 are noted in *italics*.

ST Express Route 566 travels from Auburn Station to the Overlake Transit Center, also serving Kent Station, the Renton Transit Center and Bellevue Transit Center. Midday, southbound in the morning peak period and northbound in the afternoon peak period has service every 30 minutes. In the morning peak period there are additional northbound trips that start at Kent Station and additional southbound trips in the afternoon peak period that end at Kent Station. For these periods and directions this results in service every 15 minutes or better, with some trips just six to seven minutes apart. Transfers to and from Sounder are convenient.

King County Metro Route 150 provides all day bi-directional service every 15 minutes between Kent Station and downtown Seattle, with stops at the Park-and-Ride at James Street and Lincoln, Southcenter, the Tukwila Interurban Investment lot and Tukwila Park-and-Ride (at 13445 Interurban Avenue S). There are acceptable transfer times for most Sounder trips in both directions for both peak periods, with the exception of the first two northbound Sounder trips in the morning (the first southbound bus misses the second northbound Sounder trip by two minutes but this may be a limited market).

King County Metro Route 153 connects Kent Station to the Renton Transit Center, stopping at the Renton Park-and-Ride and travelling mostly via E Valley Road, primarily through an industrial/ commercial area. Service is offered from about 6:00 a.m. to 6:00 p.m. with service every 30 minutes in the peak period and every 60 minutes midday. In the morning the northbound bus trips provide an acceptable transfer connection from about half of the northbound Sounder trips. There are acceptable return transfers for nearly all of the southbound Sounder trips in the afternoon.

Tukwila Station is the location for timed transfer connections between Sounder and King County Metro Route 154, which provides northbound peak period service in the morning and southbound in the afternoon between Kent Station and Federal Center South, via the Boeing (Duwamish) Industrial area. There are four a.m. and four p.m. trips.

King County Metro Routes 158/159/162 are an intra-scheduled set of routes providing service between Timberlane, Kent East Hill, downtown Kent/Kent Station and downtown Seattle via I-5. This is peak period, peak direction service only, with some trips timed to meet Sounder trips. Route 162 trips operate only between Kent Station and downtown Seattle. The Sounder schedule is shown on the 158/159/162 timetable. *This service remains largely the same as in Fall 2010, with the exception of a Route 162 trip leaving Kent Station for downtown Seattle at 6:10 a.m. which has been dropped from the schedule, however there is an alternative for passengers as a Sounder trip leaves from this location for Seattle at 6:09 a.m.*

Another intra-scheduled group of routes are the King County Metro Routes 164/166/168, connecting Kent Station to Green River Community College (Route 164), Highline Community College/Des Moines (Route 166) and Timberlane (Route 168) east of Kent. All have service every 30 minutes in both directions from about 5:00 a.m. to 10:00 p.m. (midnight on the 168). The scheduling for these routes takes into account work and school class times, as well as the potential for acceptable transfer connections with Sounder, which makes for a scheduling challenge. In fact, there are acceptable transfer connections between Route 168 and Sounder. *The routing and frequency of service remains the same for these routes. The span of service and schedules have been modified, most notably on Route 164, but overall the connections with Sounder remain about the same.*

King County Metro Route 169 operates between Kent Station and the Renton Transit Center via 104th/108th Avenues SE all day, approximately every 30 minutes. There are acceptable transfer connections from northbound morning Sounder trips to the 169 and acceptable return connections in the afternoon. *This route has been rescheduled. The connections remain good in the morning with the exception of the last Sounder trip, but in the afternoon there are good connections for only about half of the Sounder trips.*

Service is provided every 30 minutes all day on King County Metro Route 180 between Burien and White River Junction, south of Auburn. This route serves SeaTac/Airport Link Station, Kent Station and Auburn Station. The Burien-Kent portion of the route has good transfers to northbound Sounder trips in the morning and southbound Sounder trips in the afternoon. The portion of the route south of Auburn Station is oriented, schedule-wise, to the Auburn Station. *There have been some schedule adjustments to this route but the basic service level remains the same. However, in the afternoon peak period, three additional southbound trips between Kent Station and Auburn have been added to the schedule, resulting in approximately 15 minute directional frequency for part of the peak period. These trips provide good transfers from the southbound Sounder trips.*

King County Metro Route 183 connects Federal Way to Kent Station via Star Lake and provides southbound service every 60 minutes from about 6:30 a.m. to the afternoon peak period, when service is every 30 minutes. Northbound service is provided every 30 minutes in the morning, then every 60 minutes until 6:00 p.m., when service ends. About half of the northbound morning trips make good connections to Sounder trips and in the afternoon most of the southbound trips make good connections with southbound Sounder trips.

King County Metro Route 913 provides service every 30 minutes all day in both directions between Riverview (northwest Kent) and Kent Station. There are good connections in the morning from the bus to the northbound Sounder trips and returning in the afternoon from southbound Sounder trips to the bus; except there is no bus trip for the first morning northbound Sounder trip or the last afternoon southbound Sounder trip. For trips from northbound Sounder to the bus in the morning and from the bus to southbound Sounder in the afternoon, the wait times are in the 15-25 minute range. *This route has been extensively modified. The route still serves most of the old Route 913 to Riverview but it has been expanded to also serve the 76th Avenue S portion of Route 918, which has been discontinued. It operates*

as a counter-clockwise loop in the morning and clockwise in the afternoon. The service is now peak period only, with a schedule that effectively replicates the previous Route 918 service along 76th Ave S. There are six morning and eight afternoon trips with good timed transfers from northbound Sounder trips in the morning and to southbound Sounder trips in the afternoon.

King County Metro Routes 914 and 916 are midday local routes within Kent that do not currently provide service during the peak commute hours.

King County Metro Route 918 is a peak period only loop from Kent Station through the industrial area to the north of downtown Kent and back to Kent Station. There are six morning and six afternoon trips with timed transfers from and to Sounder (the last morning northbound and afternoon southbound Sounder trips do not have a corresponding bus trip). *This route has been eliminated. King County Route 913 now covers part of this route.*

King County Metro Route 952 is a peak period service between Auburn and Everett Boeing via SR 167 and Interstate 405 (I-405) with a stop at Kent Station. There are four northbound bus trips in the morning and four southbound trips in the afternoon. The bus and Sounder schedules are not compatible for transfers.

Origin and Destination

One hundred forty-three of the passengers who boarded at Kent Station were surveyed during the first week of November 2010. Table 2-6 shows the city of origin for the passengers surveyed. Of these 143 passengers, 88% disembarked at King Street Station, followed by Tacoma Station (5%).

Rider Survey Information

Table 2-7 summarizes the station arrival access mode data from the passenger surveys. Three-quarters of the passengers who returned surveys drove themselves to the station on that day. Six percent of passengers used transit and 6% walked to the station.

Station Area Arrival Access Mode

Arrival mode information was gathered by direct observation at the station on the morning of November 3, 2010 from 5:00 to shortly after 8:30 a.m., when the last train was scheduled to depart. On that day, the last two trains were delayed by a blockage between Puyallup and Sumner, but station arrival mode

Table 2-6: Kent Passenger City of Origin

City	Boardings	% of Boardings
Auburn	14	9.8
Covington	16	11.2
Kent	102	71.3
Maple Valley	5	3.5
Other	6	4.2
TOTAL	143	100.0

Table 2-7: Kent Sounder Access

Mode	% of Arrivals
Drive	75
Drop-off	12
Carpool	1
Feeder Transit	6
Bike	0
Walk	6
Other/Sounder Reverse	0
TOTAL	100

Table 2-8: Kent Arrival Mode

Mode	Arrivals	% of Arrivals
Auto	1,108	54.1
Feeder Transit	562	27.5
Bicycle	9	0.4
Drop-off	145	7.1
Walk	62	3.0
Train	161	7.9
TOTAL	2,047	100.0

data were tabulated based on scheduled train arrival times, not actual ones. A total of 2,047 arriving passengers were observed. Table 2-8 summarizes the station arrival mode data.

Slightly more than half of the arriving passengers drove themselves to the Kent station on that day. A little more than a quarter of passengers arrived by feeder transit. About 8% of arrivals were by Sounder train.

Observations in the Field

As a multimodal transit center, the Kent Station has a large amount of arriving traffic that is not bound for Sounder trains. In particular, a substantial number of those arriving by feeder transit leave the station on another bus. In addition, several of those arriving at the Kent Station on each train left the station on their bicycles. Some patrons observed arriving on foot could have parked or been dropped off out of the view of the observation team. The 976-space parking garage did not fill during the observation period. Four accessible spaces, 33 regular spaces, and 18 vanpool-only spaces were empty at the end of the observation period.

Traffic Counts

Three intersections (see Figure 2-2) were counted between 6:30 and 8:30 a.m. on November 3, 2010 (the same day station arrival mode split observations were recorded). The intersections counted are west of the station because that is where nearly all of the station parking is located. No traffic operation issues at any of the three intersections were observed in the morning peak hour (7:25 to 8:25 a.m.).

The 1st Avenue N/W James Street intersection is unsignalized and W James Street traffic is not required to stop. Left turns are prohibited by signage and a median curb on W James Street.

The 1st Avenue N/W Smith Street intersection is unsignalized and W Smith Street traffic is not required to stop. The Ramsay Way/W Smith Street intersection is signalized, with left turn lanes on all four approaches. It is the primary station access point for station users who park in the parking garage.

Jurisdiction Goals and Policies

Kent Station is designated as Urban Center by the City's Comprehensive Plan and is zoned as Downtown Commercial Enterprise. The station is within the City's Regional Growth Center designated by the Puget Sound Regional Council (PSRC).

Kent Comprehensive Plan. Kent revised its Comprehensive Plan in 2004. The City's first Comprehensive Plan was adopted in 1977 and was updated in 1995 to address GMA requirements (City of Kent 2004). Per the GMA, Kent is scheduled to update its Comprehensive Plan by June 30, 2015.

The Kent Downtown Plan (City of Kent 1989) was completed just prior to the passage of the GMA, and set the stage for designating the area as an Urban Center in 1995 under the GMA.

Kent updated its Downtown Strategic Action Plan in 2005, which serves as a basis for developing the Urban Center and implementing the Kent Comprehensive Plan (City of Kent 2005).

The following specific public improvements and redevelopment opportunities from the Downtown Strategic Action Plan are applicable to the Sounder Access Study:

- *Construct traffic and pedestrian improvements to Downtown streets as necessary to provide access.*
- *Support residential development in the North Core District.*
- *Encourage mixed-use development projects in proximity to the Kent Transit Center [park and ride].*

In 2001, the City purchased the Borden Chemical property west of the commuter rail station, which made future development of high intensity mixed uses in proximity to the station possible. The City initiated a Planned Action process for the property for three development scenarios within the North Core District Subarea. The City Council selected Alternative 2 (Kent Station Proposal) as the Preferred Alternative in July 2002, and groundbreaking occurred in June 2004.

Kent Station is an 18-acre private development on the former Borden property that includes office, retail, entertainment restaurants, and a branch campus of the Green River Community College.

The following Comprehensive Plan goals and policies address the key issues and priorities related to station oriented development:

- *Kent shall maintain the designation of its Urban Center within which Center-appropriate land uses, employment, housing infrastructure, and transit improvements shall be concentrated.*
- *The City shall develop a safe transportation network which promotes a variety of mobility options, including private automobiles, public transit, bicycling, and walking.*
- *The City shall continue to support public transit, including expanded Sounder commuter rail service. Transit service shall be focused in designated medium- and high-density centers within the City.*
- *Encourage residential development in designated medium- and high-density commercial and mixed-use areas.*
- *Ensure opportunities for affordable housing in proximity to employment, public transportation, and human services.*
- *Additional office and retail development shall be encouraged, particularly in designated centers which can be served by transit.*

- *Public infrastructure, transportation, and transit service enhancements shall be utilized to focus economic development in designated medium and high-density areas.*

Implementation policies from the Comprehensive Plan include:

- *LU-3.1: Allow and encourage mixed-use development which combines retail, office, and residential uses, or as a portion of the total mixture of uses, to provide a diverse, vibrant and well designed Urban Center.*
- *LU-4.2: Focus future public transportation investments in the Urban Center.*
- *LU-9.4: Locate housing opportunities with a variety of densities within close proximity to employment, shopping, transit, and where possible, near human and community services.*
- *LU-10.1: Allow and encourage high to medium density residential development in the Downtown and designated Activity Centers.*
- *TR-1.6: Coordinate new commercial and residential development in Kent with transportation projects to assure that transportation facility and service capacity is sufficient to accommodate the new development.*
- *TR-1.9: Promote multimodal facilities and services, street design, and development that includes residential, commercial and employment opportunities within walking/bicycling distance so that distances traveled are shorter and there is less need for people to travel by automobile.*
- *TR-6.3: Coordinate with BNSF Railroad, UP [Union Pacific] Railroad, Washington Utilities and Trade Commission (WUTC), and Sound Transit to ensure maximum transportation efficiency on both roads and rails, while minimizing adverse impacts on the community.*
- *TR-7.2: Provide non-motorized facilities with signage within all areas of the City to connect land use types, facilitate trips made by walking or bicycling, and reduce the need for automobile trips.*
- *TR-7.3: Create a comprehensive system of pedestrian facilities using incentives or regulations. All future development should include pedestrian and bicycle connections to schools, parks, community centers, public transit services, neighborhoods and other services. Provide special attention to the requirements set forth in the Americans with Disabilities Act (ADA) regarding the location and design of sidewalks and crosswalks.*
- *TR-7.7: Encourage the installation of safe and secure bicycle parking facilities at park and ride facilities, train/transit stations, shopping malls, office buildings, and all land use types that attract the general public.*
- *TR-8.1: Work with regional transit providers to resolve the transit needs identified in the TMP and provide high quality travel options for local residents, employees, students, visitors, business, and other users of local and regional facilities.*

Kent Transit Master Plan. Kent's Transit Master Plan was updated in 2007 (City of Kent 2007). The Kent Transit Master Plan recommends service improvements that provide local circulation in the City of Kent and that connect Kent residents to other regional communities, based on an extensive needs assessment. Capital improvements and pedestrian projects that support transit service goals are also detailed, as are transit-supportive land use policies. Specific policies promoting alternative mode use are included.

Kent Transportation Master Plan. Kent's Transportation Master Plan was adopted in 2008 (City of Kent 2008). This plan outlines specific geographic areas and projects to improve pedestrian, bicycle and transit corridors and connections that directly serve the Sounder station. These projects are prioritized by mobility, safety, multimodal, environment and implementation (cost effectiveness, funding commitment and project readiness). The Non-Motorized System chapter includes an inventory of existing facilities and a needs assessment for pedestrian and bicycle access.

Kent Bicycle Advisory Board. In 1991, the Kent City Council adopted Resolution 1298, creating the Board. Members of the Board work with Council and staff to identify and promote bicycle facility improvements.

Commute Trip Reduction. Kent City Code No. 6.12 (Ordinance No. 3474) implements State requirements for CTR. As part of Kent's Transportation Master Plan, the City of Kent updated the CTR Ordinance and the CTR Local Plan in 2008 to incorporate the state's 2006 CTR Efficiency Act. At the time of this report there were 35 worksites in Kent participating in the program, which provides public outreach and marketing of commute alternatives to about 15,000 employees at CTR-affected worksites.

Access Deficiency Assessment

Station Description and Major Barriers:

- Kent Station is located in the northern part of downtown Kent. The station includes a pedestrian bridge that links the station's parking garage and the west and east platforms, providing direct pedestrian and bicycle access to the station from both sides of the rail line. Kent's downtown street network south and immediately east of the station is fairly flat, mostly a grid, and well connected. Larger land parcels northwest and north of the station provide more limited pedestrian and bicycle connectivity than the downtown grid.
- The station area is bounded by SR 167 to the west, with limited street and non-motorized connections between west Kent and the station. There are steep slopes east of downtown Kent.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- The Sounder Passenger Access Survey indicates a significant share of pedestrian trips but only one reported bicycle trip originating within the 15-minute travel shed, perhaps due to the steep slopes that hinder connectivity between east Kent residential areas and the station or from limited connections between west Kent and the station.

- Riders parking at the King County Metro park-and-ride at N Lincoln Ave and E Smith St already walk, bike, or catch a bus to Kent Station and this is expected to continue.
- Slightly more than 1,100 employed residents are located within a 15-minute walk of the station, and over 19,900 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit B.

Feeder Transit Service Limitations (changes in feeder transit service made since 2010 are in italics):

- Many transfers to and from Sounder are convenient due to route service timing.
- King County Metro Route 150 does not provide a connection for the first two northbound Sounder trips.
- There is the potential for greater transfer connections for work and school class schedule times (Green River Community College and Highline Community College) with King County Metro Routes 164/166/168. *The span of service and schedules have been modified on these routes, most notably on Route 164, but overall the connections with Sounder remain about the same.*
- King County Metro Route 913 does not provide a connection for the first morning northbound and last afternoon southbound Sounder trips. For trips from northbound Sounder to the bus in the morning and from bus to southbound Sounder in the afternoon, the wait times are in the 15-25 minute range. *The service is now peak period only. There are six morning and eight afternoon trips that provide good connections from northbound Sounder trips in the morning and to southbound Sounder trips in the afternoon.*
- King County Metro Route 918 does not meet the last morning northbound or last afternoon southbound Sounder trips. *This route has been eliminated; however King County Metro Route 913 now covers part of this route.*
- King County Metro Route 952, which connects Auburn and Everett Boeing via the Kent Transit Center, is not compatible for Sounder transfers.

Vehicle Access and Network Capacity:

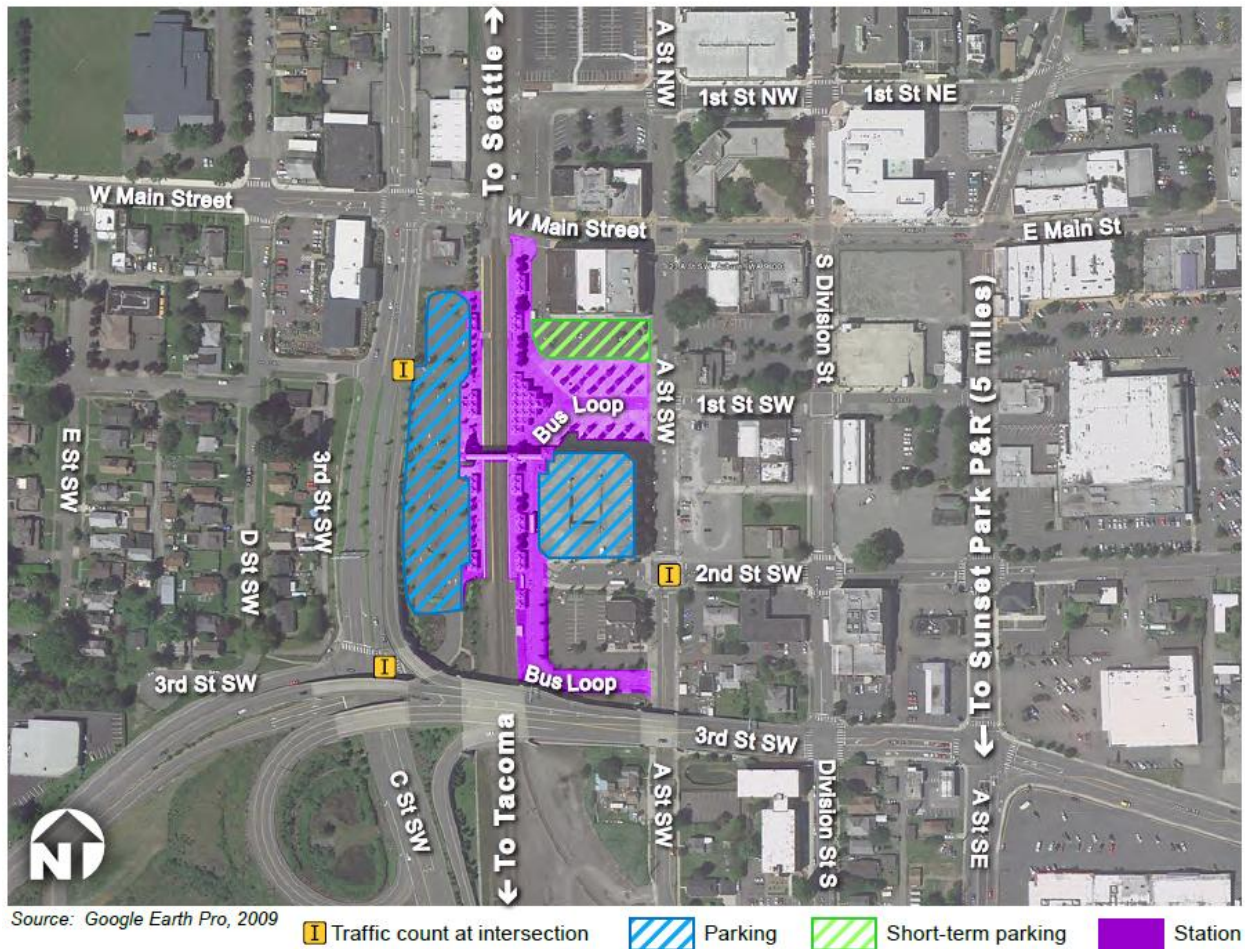
- Egress from the garage is slow in the afternoon peak, potentially discouraging some passengers from parking. *Sound Transit's parking utilization report indicates that 94% of capacity was used in March 2012.*
- There are no level of service issues in the morning peak at intersections that serve the station.

Auburn

The Auburn Sounder Station is located in the southwestern part of downtown Auburn, just south of West Main Street, the downtown's primary east-west arterial.

Sounder trains depart each weekday morning from Auburn northbound to Seattle at 5:20, 6:01, 6:26, 6:51, 7:16, 7:45, and 8:25 a.m., and southbound to Tacoma at 6:36 and 7:16 a.m. Figure 2-3 shows the location of Auburn Station.

Figure 2-3: Auburn Station (23 A Street SW)



There are 521 stalls available to transit riders and 42 stalls controlled by the City of Auburn in the garage, plus 113 surface parking stalls. There are also 32 bicycle rack spaces and 26 bicycle lockers with a 40-bicycle capacity available. The garage is open from 5:00 a.m. to 2:00 a.m. Monday through Friday, and from 6:00 a.m. to 2:00 a.m. on weekends and holidays. There is space available for up to 37 vehicles at any one time for passenger drop-off and pick-up.

Transit Connections

Bus stops are located east of the commuter rail platforms, on the bus loop. Auburn Station is served by two ST Express bus routes, six King County Metro routes, and one Pierce Transit (PT) bus route. Changes in transit service made since 2010 are noted in *italics*. *Two new King County Metro routes have been added serving Auburn Station.*

ST Express Route 566 travels from Auburn Station to the Overlake Transit Center, also serving Kent Station, the Renton Transit Center, and Bellevue Transit Center. At the Auburn Station this route has service all day, approximately every 30 minutes in both directions. There are acceptable transfer connections at this station for a few trips; however, additional Route 566 trips start and end at Kent Station, making it a more convenient location for most transferring passengers.

ST Express Route 578 serves the Puyallup, Sumner and Auburn Stations as the midday and evening/night extension of ST Express Route 577 from Federal Way to Seattle. It also provides peak period, off-peak direction (southbound in the morning, northbound in the afternoon) service to or from Tacoma (Tacoma Dome Station and downtown Tacoma).

King County Metro Route 152 provides peak period, peak direction service from Auburn Station to downtown Seattle via I-5, with service every 30 minutes. It also stops at the Auburn and Star Lake Park-and-Rides. It competes with Sounder but the train is faster to south downtown Seattle. *The schedule for Route 152 now has one less trip in the morning. The 7:17 a.m. trip to Seattle, at approximately the same time as a Sounder trip, has been eliminated.*

Burien, Kent, Auburn, southeast Auburn, and White River Junction are connected by King County Metro Route 180, which stops at both the Auburn and Kent Stations. Route 180 runs every 30 minutes, all day, in both directions. The White River Junction/southeast Auburn portion of the route has good transfer connections to Sounder at the Auburn Station (the Burien-Kent portion has the best and logical transfers at Kent Station). *This route has been rescheduled but has not significantly affected connections with Sounder.*

King County Metro Route 181 travels between Twin Lakes/Federal Way and East Auburn (Green River Community College) via Auburn Station and provides service every 30 minutes all day in both directions. The East Auburn to Auburn Station portion of the route has good transfer connections to northbound Sounder in the morning and back in the afternoon. Transfer connections from Federal Way to Sounder are acceptable in the morning (missing one Sounder trip) but only about one-half of the afternoon trips have an acceptable transfer.

New King County Metro Routes 186 (peak periods) and 915 (midday) provide direct service between Enumclaw and Auburn Station. The peak period service is bi-directional and connections with Sounder are shown on the route's timetable. There are five good connections in the morning to Seattle bound Sounder trips and one good connection in the morning from a southbound Sounder trip. In the afternoon there are five good connections from southbound Sounder trips and one for a northbound Sounder trip.

King County Metro Route 910 connects North Auburn, downtown Auburn/Auburn Station and the SuperMall. Service is every 60 minutes in both directions from about 8:00 a.m. to about 4:30 p.m. These service hours only match up with the last morning peak and first afternoon peak Sounder trips.

Auburn/Auburn Station, Algona, and White River Junction are connected by service every 60 minutes on King County Metro Route 917, which operates all day. During the peak periods there are good transfer connections to three northbound morning and three afternoon southbound Sounder trips.

King County Metro Route 919 connects North Auburn, Auburn Station, and southeast Auburn with bi-directional service every 60 minutes from about 8:00 a.m. to 4:00 p.m., not within the Sounder peak direction commute trip times.

PT also serves the Auburn Station. PT Route 497 provides shuttle service between the Sunset Park-and-Ride and Sounder for all peak period, peak direction Sounder trips. Transfer times are scheduled to allow five minutes to make the transfer between the train and bus. The train departure and arrival times are shown on the bus timetable. Per the schedule, afternoon bus trips will wait for Sounder connections (i.e. delayed trains) before departing.

Origin and Destination

Three hundred thirty-nine of the passengers who boarded at Auburn Station were surveyed during the first week of November 2010. Table 2-9 shows the city of origin for the passengers surveyed. Of these 339 passengers, the majority disembarked at King Street Station (92%) and Tukwila Station (6%).

Rider Survey Information

Table 2-10 summarizes the station arrival access mode data from the passenger surveys.

Sixty-two percent of the passengers who returned surveys drove themselves to the station on that day. Sixteen percent of passengers arrived by feeder transit.

Table 2-9: Auburn Passenger City of Origin

City	Boardings	% of Boardings
Algona	12	4
Auburn	226	67
Bonney Lake	5	1
Covington	11	3
Enumclaw	19	6
Federal Way	6	2
Kent	5	1
Lake Tapps	16	5
Maple Valley	8	2
Pacific	10	3
Other	21	6
TOTAL	339	100

Table 2-10: Auburn Sounder Access

Mode	% of Arrivals
Drive	62
Drop-off	13
Carpool	4
Feeder Transit	16
Bike	1
Walk	3
Other/Sounder Reverse	1
TOTAL	100

Station Area Arrival Access Mode

Arrival mode information was gathered by direct observation at the station on the morning of November 30, 2010 from 5:00 to shortly before 8:30 a.m., when the last train departed. A total of 852 arriving passengers were observed.

Table 2-11 summarizes the station arrival mode data.

Just over half of arriving passengers drove themselves to the Auburn Station on that day. Over 30% of station users arrived by feeder transit.

Table 2-11: Auburn Arrival Mode

Mode	Arrivals	% of Arrivals
Auto	439	51.5
Feeder Transit	263	30.9
Bicycle	11	1.3
Drop-off	72	8.5
Walk	37	4.3
Train	30	3.5
TOTAL	852	100.0

Observations in the Field

Auburn is a transit hub, with buses from multiple systems (PT, King County Metro, and Sound Transit) serving the station. The complexity of inter-modal access and interchange made counting specific commuter rail access by mode difficult. Table 2-11 shows arrival mode split data for all arrivals at the station during the time commuter rail trains were running, but does not show whether all of these arrivals left by train, or some by another mode.

The west-side park-and-ride lot was full after the third northbound train departure at 6:26 a.m., and the garage was full after the fourth northbound train departure at 6:51 a.m. Surface street parking spaces are numerous and began to fill following the fourth northbound train departure. It was difficult to distinguish walk-up passengers originating from the surrounding area from auto-mode users parking in peripheral lots and on-street spaces. For this information, we rely on the rider survey results.

Traffic Counts

Three intersections near the station were counted between 6:30 and 8:30 a.m. on November 2, 2010 (see Figure 2-3). Both of the west-side parking lot driveways on C Street SW were counted, as well as the main parking garage entry on 2nd Street SW.

The 2nd Street SW/parking garage entry intersection is signalized and 2nd Street SW traffic is required to stop when leaving the garage at this signal. As with the Kent and Tacoma Dome Station parking garage entrances, this intersection has an earlier peak hour (6:30 to 7:30 a.m.) than an intersection of two public streets would. Travelers using Sounder parking arrive at the stations earlier than the normal morning peak hour, both because Sounder trains run earlier in the morning and because these parking garages tend to fill and garage parking is generally considered preferable. There are no traffic operation issues at this intersection in the morning peak hour.

The C Street SW/south parking entry intersection is signalized. The west leg of this intersection is the westbound on-/off-ramps to and from Highway 18. There are no traffic operations issues at this intersection in the morning peak hour (6:55 to 7:55 a.m.).

The C Street SW/north parking entry intersection is unsignalized, and C Street SW traffic is not required to stop. East-west left turns and through movements are prohibited, as are left turns from C Street SW. There are no traffic operations issues at this intersection in the morning peak hour (7:00 to 8:00 a.m.).

Jurisdiction Goals and Policies

Auburn Station is designated as Urban Center by the City's Comprehensive Plan and is zoned Downtown Urban Center. The station is within the City's Regional Growth Center designated by the PSRC.

Auburn Comprehensive Plan. Auburn revised its Comprehensive Plan in 2009. The original plan was adopted in 1986 and amended in 1995 to address GMA requirements. Per the GMA, Auburn is scheduled to update its Comprehensive Plan by June 30, 2015.

Auburn's Urban Center designation includes the following characteristics:

- Concentrated employment and housing, and a mix of other land uses, with direct service by high capacity transit
- An extensive transportation system to help reduce reliance on auto travel

Auburn adopted its Downtown Plan in 2001 and has since begun implementing many of the plan's strategic objectives:

- Establishing the 220-acre downtown Auburn planning area (bounded by the Interurban Trail to the west, 2nd Street NW and 3rd/4th Streets NE to the north, E Street NE/SE to the east, and SR 18 to the south), including Auburn Station, that is the focus for future downtown redevelopment
- Providing incentives for downtown development and redevelopment through various measures, including reducing off-street parking requirements compared to other areas of the city and in some cases waiving transportation impact fees if a lower level of service is desired
- Encouraging non-motorized, pedestrian and bicycle connections and linkages to and within the urban center area
- Encouraging protection of historic assets and resources from redevelopment activities
- Identifying potential catalyst projects and sites to spur development activity in the downtown and to better focus redevelopment and marketing efforts
- Encouraging more residential development downtown as well as 24-hour type uses and nighttime activity
- Seeking to remove undesirable land uses and other blighting influences in the downtown area

- Promoting street improvements and enhancements to improve access and the visual qualities of the streetscape

In early 2007, the City established a new zoning district for the majority of downtown, the Downtown Urban Center district. This district allows all types of land uses unless specifically prohibited, and regulates the intensity of development by allowed floor area ratio, providing incentives for higher intensity of use.

To meet the City's goal to encourage the Comprehensive Plan's direction, the City has adopted an overall objective and several policies relating to downtown Auburn transportation. While supportive, the policies pre-date the commuter rail station development and operations but remain valid.

Implementation policies from the Comprehensive Plan include:

- *LU-86: Emphasis should be given to enhancing pedestrian linkages between the Hospital area, the Main Street retail core, the Performing Arts Center, the southwestern portion of Downtown, and the parking area adjacent to Safeway. An important element of this emphasis will be to reduce the pedestrian barrier effect of Auburn Avenue and Auburn Way.*
- *LU-87: The City should build upon past efforts to improve pedestrian amenities, through public improvements, sign regulations and development standards. The maintenance of public and private improvements should be given priority commensurate with downtown's role as the focal point of the community.*
- *LU-88: The City shall work with transit providers to increase the availability and effectiveness of transit in downtown and between downtown, other commercial and employment areas, residential areas, and the region at large.*
- *LU-89: As regional transportation programs such as commuter rail are implemented, the City will strive to ensure that the downtown is a beneficiary.*

Auburn Comprehensive Transportation Plan. Auburn's Comprehensive Transportation Plan was amended on December 7, 2009. The plan contains a needs assessment and set of future recommendations for all modes, as well as policies and funding strategies to guide implementation of the plan. The plan includes transportation policies supporting pedestrian and bicycle use and access within the downtown Auburn area and the commuter rail station. Several downtown streets within 0.5 mile of the commuter rail station (including A Street NW, A Street Loop, and F Street SE) are designated for enhancements to include either on-street bicycle lanes or shared travel lanes. No specific, high-priority pedestrian improvements are identified in the plan for the downtown area.

Commute Trip Reduction. The City of Auburn contracts with King County Metro Transit to provide CTR support services for the CTR-affected employers in Auburn. Currently, there are 11 CTR-affected employers in Auburn, with a combined total of 5,500 employees. The agency

assists employers in complying with state law by providing rideshare support and a host of other incentives aimed at reducing single occupancy vehicles.

Access Deficiency Assessment

Station Description and Major Barriers:

- Auburn Station includes a pedestrian bridge linking the station's parking garage and the west and east platforms, providing direct pedestrian and bicycle access to the station from both sides of the rail line. Auburn's gridded and flat street system is well connected and facilitates bicycle access to the station. Pedestrian access is generally good; however, SR 18 does present a barrier to residents south of the station.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- The Sounder Passenger Access Survey indicates a significant share of pedestrian trips and a number of bicycle trips originating within the 15-minute travel shed.
- Slightly more than 1,000 employed residents are located within a 15-minute walk of the station, and over 12,700 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit C.

Feeder Transit Service Limitations:

- King County Metro Route 181 misses one morning and approximately half of the afternoon Sounder trips.
- King County Metro Route 910 misses all but the last morning and the first afternoon Sounder trip.

Vehicle Access and Network Capacity:

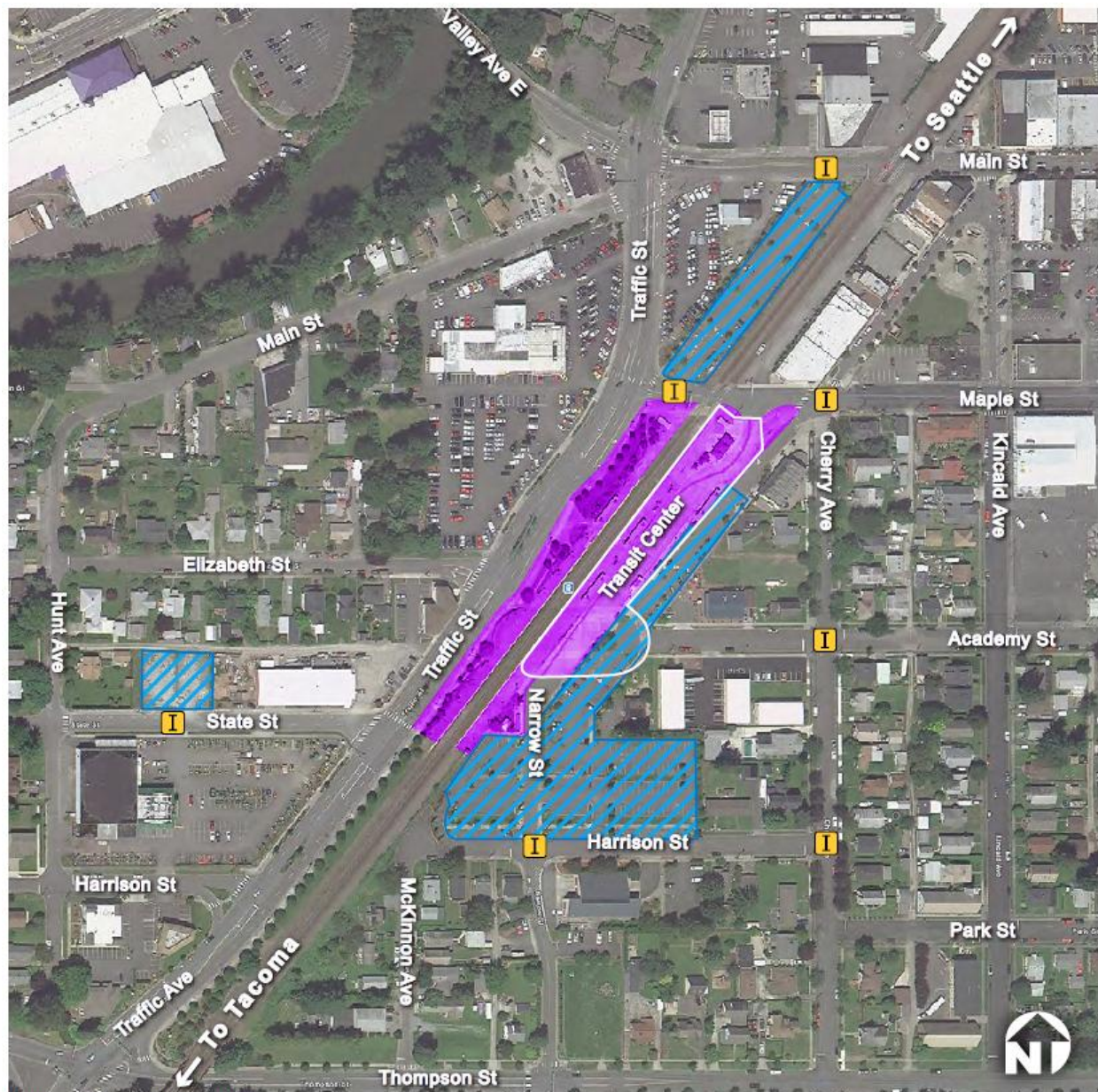
- This station is accessible on a regional level due to the close proximity of SR 18, SR 164, and SR 167.
- Station parking, including the garage, is typically full after the fourth morning Sounder trip.
- There are no level of service issues in the morning peak at intersections that serve the station.

Sumner

The Sumner Sounder Station is located in the southwestern part of downtown Sumner, south and west of the Maple Street/Narrow Street/Cherry Street intersection.

Sounder trains depart each weekday morning from Sumner northbound to Seattle at 5:12, 5:52, 6:17, 6:42, 7:07, 7:37, and 8:17 a.m. and southbound to Tacoma at 6:45 and 7:25 a.m. Figure 2-4 shows the location of the Sumner Station.

Figure 2-4: Sumner Station (810 Maple Street)



Source: Google Earth Pro, 2009

I Traffic count at intersection

Parking

Station

There are 339 surface parking stalls, including a leased lot at Hunt Avenue and State Street, two bicycle racks (a total of 10 spaces) and seven bicycle lockers with a 14-bicycle capacity. There is space available east of the commuter rail platforms for up to 20 vehicles at any one time for passenger drop-off and pick-up.

Transit Connections

At Sumner Station, a transit center is incorporated into the station, along Narrow Street between Maple and Academy Streets. Changes in transit service made since 2010 are noted in *italics*. *Due to the defeat of Proposition 1 ("PT Tomorrow") in February 2011, service reductions were implemented in June and October 2011 affecting service to Puyallup Station. All special event services were eliminated.*

ST Express Route 578 is a midday and evening extension of ST Express Route 577 from Federal Way to downtown Seattle. This extension serves the Auburn, Sumner and Puyallup Stations. This service supplements Sounder service by providing a fast service to and from downtown Seattle when Sounder service is limited or not scheduled. ST Express Route 578 also provides peak period, off-peak direction (southbound in the morning and northbound in the afternoon) service between Sumner and Tacoma (Tacoma Dome Station and downtown Tacoma).

PT Route 408 connects the Bonney Lake Park-and-Ride with downtown Sumner and Sumner Station. Service is approximately every 30 minutes in the peak period and every 60 minutes midday. It functions as both a local route and a "shuttle" to Sounder with good transfers to four of the seven morning northbound Sounder trips and five of the seven afternoon southbound commute trips. *This route has been eliminated, but PT Route 496 continues to provide service between the Bonney Lake Park-and-Ride and Sumner Station.*

PT Route 496 is a shuttle between the Bonney Lake Park-and-Ride and the Sumner Station with timed transfers for all peak period northbound morning and southbound afternoon trips.

PT Route 409 connects the 72nd Street Transit Center (Tacoma), Puyallup, Sumner/Sumner Station, and the Sumner Industrial area (about three miles north of the station). This route has service every 30 minutes in the peak period and every 60 minutes midday. The Sounder schedule is shown in the bus timetable and there are acceptable transfer connections from and to Puyallup, with two morning and two afternoon connections to and from the industrial area. *There have been changes to this route that reduced access to Sumner Station. Service is now every 60 minutes, a reduction from peak period service of 30 minutes, which eliminated some transfer connections. In addition, the segment of the route between Sumner Station and the Sumner Industrial area has been eliminated.*

Origin and Destination

Two hundred sixty-nine passengers who boarded at Sumner Station were surveyed during the first week of November 2010. Table 2-12 shows the city of origin for the passengers surveyed. Of these 269 passengers, the majority disembarked at King Street Station (77%) and Tukwila Station (18%).

Table 2-12: Sumner Passenger City of Origin

City	Boardings	% of Boardings
Bonney Lake	100	37.2
Buckley	18	6.7
Edgewood	11	4.1
Lake Tapps	14	5.2
Orting	28	10.4
Puyallup	36	13.4
Sumner	47	17.4
Other	15	5.6
TOTAL	269	100.0

Rider Survey Information

Table 2-13 summarizes the station arrival access mode data from the passenger surveys.

Seventy-one percent of the passengers who returned surveys drove themselves to the station on that day. An additional 14% of passengers were dropped off that day.

Table 2-13: Sumner Sounder Access

Mode	% of Arrivals
Drive	71
Drop-off	14
Carpool	0
Feeder Transit	7
Bike	3
Walk	4
Other/Sounder Reverse	1
TOTAL	100

Station Area Arrival Access Mode

Arrival mode information was gathered by direct observation at the station on the morning of November 4, 2010 from 4:45 to approximately 8:20 a.m., which was just after the last train departed. A total of 756 arriving passengers were observed. Table 2-14 summarizes the station arrival mode data.

Approximately 70% of the arriving passengers drove themselves to the Sumner Station. Feeder transit and drop-off arrivals also featured heavily in the Sumner Station passengers.

Table 2-14: Sumner Arrival Mode

Mode	Arrivals	% of Arrivals
Auto	534	70.6
Feeder Transit	109	14.4
Bicycle	18	2.4
Drop-off	84	11.1
Walk	11	1.5
Train	0	0.0
TOTAL	756	100.0

Observations in the Field

The designated park-and-ride lot adjacent to the station was near capacity following the second northbound train departure at 5:52 a.m. Following the third northbound train departure at 6:17 a.m., all park-and-ride lots and immediate surface street parking spaces were filled (100% utilization). After that, observations focused on other modes of arrival.

It was difficult to distinguish whether passengers arriving on foot were residents in local neighborhoods or parking on-street in local neighborhoods, especially as the on-site parking areas reached capacity. The off-site parking lot at Hunt Avenue and State Street appeared to

be the parking area of choice for patrons arriving later, reflected in the large number of pedestrians accessing the station from the west along adjacent streets.

Traffic Counts

Six intersections near the station (see Figure 2-4) were counted between 6:30 and 8:30 a.m. on November 3, 2010. A seventh intersection (Main Street/north parking lot driveway) was counted between 6:30 and 8:30 a.m. on November 11, 2010.

The Harrison Street/Narrow Street intersection is unsignalized, with stop signs on all four legs. The intersection is south and west of the station area, and the north leg of the intersection is the main entry to the south parking lot. There are no traffic issues at this intersection in the morning peak hour (6:40 to 7:40 a.m.).

The Harrison Street/Cherry Avenue intersection is unsignalized and Cherry Avenue traffic is not required to stop. The intersection is south of the station area, and there is no east leg at this intersection. Traffic volumes are very low and there are no traffic issues at this intersection in the morning peak hour (6:55 to 7:55 a.m.).

The Academy Street/Cherry Avenue intersection is unsignalized and Cherry Avenue traffic is not required to stop. The intersection is east of the station. Traffic volumes are very low, with each leg averaging an arriving vehicle every two minutes, and there are no traffic issues at this intersection in the morning peak hour (6:55 to 7:55 a.m.).

The Cherry Avenue/Maple Street/Narrow Avenue intersection is unsignalized and Maple Street traffic is not required to stop. Cherry Avenue ends at Maple Street, and Narrow Avenue is one-way from northwest to southeast. The intersection is northeast of the station. Traffic volumes are very low at this intersection during the morning peak hour, with three of the four legs averaging an arriving vehicle every two minutes, and the busiest (eastbound Maple Street) averaging a vehicle arrival about every 45 seconds. There are no traffic issues at this intersection in the morning peak hour (7:30 to 8:30 a.m.).

The Maple Street/north Sounder Lot Driveway intersection is unsignalized, with Maple Street traffic not required to stop. There is no south leg at this intersection. There are no traffic issues at this intersection in the morning peak hour (7:25 to 8:25 a.m.).

The Main Street/north parking lot driveway intersection is unsignalized and Main Street traffic is not required to stop. There is no north leg at this intersection. Westbound left turns from Main Street into the parking lot are prohibited by median bollards. There are no traffic issues at this intersection in the morning peak hour (7:30 to 8:30 a.m.).

The State Street/Sounder off-site parking lot driveway intersection is unsignalized and State Street traffic is not required to stop. The south leg of this intersection is a gated driveway for a tractor equipment store. This intersection has very low traffic volumes, and there are no issues at this intersection in the morning peak hour (6:30 to 7:30 a.m.).

Jurisdiction Goals and Policies

Sumner Station is designated as Public-Private Utilities & Facilities by the City's Comprehensive Plan and is zoned Central Business District.

Sumner Comprehensive Plan. Sumner revised its Comprehensive Plan in 2009. It was originally adopted in 1994 and amended in 2004 to address GMA requirements (City of Sumner 2009). The Sumner Comprehensive Plan includes specific policy, goals and objectives regarding the commuter rail station land uses and connectivity. Per the GMA, Sumner is scheduled to update its Comprehensive Plan by June 30, 2015.

The provision of regional transit service has and will continue to affect land use and transportation in Sumner. The following goals and policies address the key issues and priorities related to station-oriented development in the downtown area.

Implementation policies from the Comprehensive Plan include:

Goal 1 Support regional transit connections in the Sumner Planning Area.

- 1.1 Collaborate when possible with Sound Transit, Pierce County and surrounding cities to do joint planning on future services concerning the commuter rail and transit system.*
- 1.2 Work with local property owners to encourage the development of commercial uses compatible with the commuter rail station.*
- 1.3 Ensure that the commuter rail station does not have an unreasonable adverse impact on the residential character of the neighborhood.*
- 1.4 Consider and pursue opportunities for an increased pedestrian connection to the West Sumner Neighborhood and the Downtown business core such as a pedestrian overpass.*
- 1.5 Continue to explore the parking options and access options for the commuter rail station that are compatible with the surrounding land uses, safe, convenient, and attractive. Address options for location of future parking for expanded service over time.*
- 1.6 Plan for a train station at Stewart Road next to the golf course and adjacent to the northeastern boundary of the Sumner-Pacific Manufacturing/Industrial Center (MIC). The station would help connect high density housing centers with the proposed MIC, and may serve regional populations or function as secondary "skip-stop" stations.*
 - 1.6.1 Work with Sound Transit and Pierce Transit throughout the planning, construction, and operation of a station to ensure it is an integral part of the City's transportation system and the regional transit system.*
 - 1.6.2 Consideration will be given to design controls, compatibility with surrounding land uses, access, transit connections to other parts of town, bicycle storage,*

relationships to pedestrian and bicycle trails, and parking. Complementary land uses such as civic rooms, day care, small retail, or other uses to be integrated with the station may also be included in the station plan.

- 1.7 Promote the use of the Sounder commuter train by the entire Sumner community. Provide housing near the train station for households desiring the close transit availability, and provide services and businesses that cater to residents and train commuters.*
- 1.8 Work closely with Sound Transit to establish stations north at Stewart Road/Lake Tapps Parkway and at Shaw Road/East Main to relieve ridership and parking demands at the Sumner commuter rail station.*
- 1.9 Promote and pursue the use of underutilized parking lots throughout the City as potential remote sites for commuter rail station parking.*
- 1.10 Seek alternatives to the construction of a stand alone parking garage in the Town Center.*
- 1.11 Request that Sound Transit provide additional bicycle lockers at the station to encourage bicycle commuting to the station. Require that any expansions to parking for the station include increased bicycle lockers.*
- 1.12 Work with transit agencies to improve the frequency and location of transit service between high density residential areas and the MIC, provide connections between the rail stations and the MIC, and encourage transit ridership through efforts such as prioritizing pedestrian improvements near transit stops and outreach efforts to industrial employers.*

West of the commuter rail station, land is zoned Mixed-Use and Medium Density Residential. Land south of the station is zoned Medium Density Residential. Land east of the station areas is zoned Central Business District and Low Density Residential. Land north of the station is zoned General Commercial.

Sumner Town Center Plan. The Sumner Town Center Plan was adopted in 2005 and presents the vision and strategies for Sumner’s 210-acre Town Center. The goal was to reinforce and strengthen the downtown area as a fully functional “everyday” downtown, while maintaining its classic small-town character. The following goals and policies address the key issues and priorities related to station-oriented development in the Town Center:

- Policy TC 1.3 Promote active, pedestrian-oriented retail, service, and mixed uses.*
- Policy TC 1.6 Encourage more housing in and near Downtown to strengthen Downtown businesses, take advantage of the commuter train, offer a range of housing in the community, and provide an active, social character.*
- Policy TC 6.1 Promote the construction of housing stock in the Town Center by at least 350-500 dwelling units by 2015.*

Policy TC 6.3 Promote the redevelopment of key downtown locations such as the car dealerships and the Red Apple market through partnering with developments, Sound Transit, and other key parties.

Sumner Transportation Plan. In 2004, the City of Sumner updated their long-term Transportation Plan of 2002. The adopted plan identified specific transportation improvement projects that were needed to support the 2020 land use projections. The identified transportation projects allowed the roadways and intersections within the City to operate at or above the City's adopted level of service standards. There are no improvements listed near the Sumner Station.

Sumner Trail Master Plan. The Sumner/Pacific Trail Plan was originally adopted in September 1996 and was updated as the Sumner Trail Master Plan in 2008. On a broad scale, the trail and bicycle routes proposed in the Sumner Trail Master Plan will form linkages to major trails in the surrounding Puget Sound Communities. Near the Sumner Station, bike routes are proposed on Traffic Street, Narrow Street, and Main Street. A trail also is proposed along the White River.

Commute Trip Reduction. The City coordinates with Pierce Transit, Sound Transit, and other jurisdictions on CTR programs for three major employers in the Sumner planning area. Sumner's human resources department implements state requirements for CTR per Sumner Municipal Code Chapter 16.06. The CTR program is fairly new, and no baseline information has been collected from employers at this time.

Access Deficiency Assessment

Station Description and Major Barriers:

- Pedestrian access from the west side of Sumner Station is limited to the at-grade crossing on Maple Street and from the sidewalk along Traffic Avenue/Street. West of the station, the barriers provided by SR 167 and SR 410 limit the amount of potential residential or employment growth within walking distance to the station. East of the rail line, Sumner's street network provides relatively good connectivity.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- The Sounder Passenger Access Survey indicates a significant share of pedestrian trips and a number of bicycle trips originating within the 15-minute travel shed.
- Slightly over 1,000 employed residents are located within a 15-minute walk of the station, and over 6,200 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit D.

Feeder Transit Service Limitations (changes in feeder transit service made since 2010 are in italics):

- PT Route 408 is not timed to provide acceptable transfers for three of the seven morning northbound and two of the seven afternoon southbound Sounder trips, by arriving too early or too late. *This route has been eliminated.*

- *Modifications and reductions to PT routes serving Sounder stations were implemented in October 2011 due to the defeat of Proposition 1 ("PT Tomorrow").*

Vehicle Access and Network Capacity:

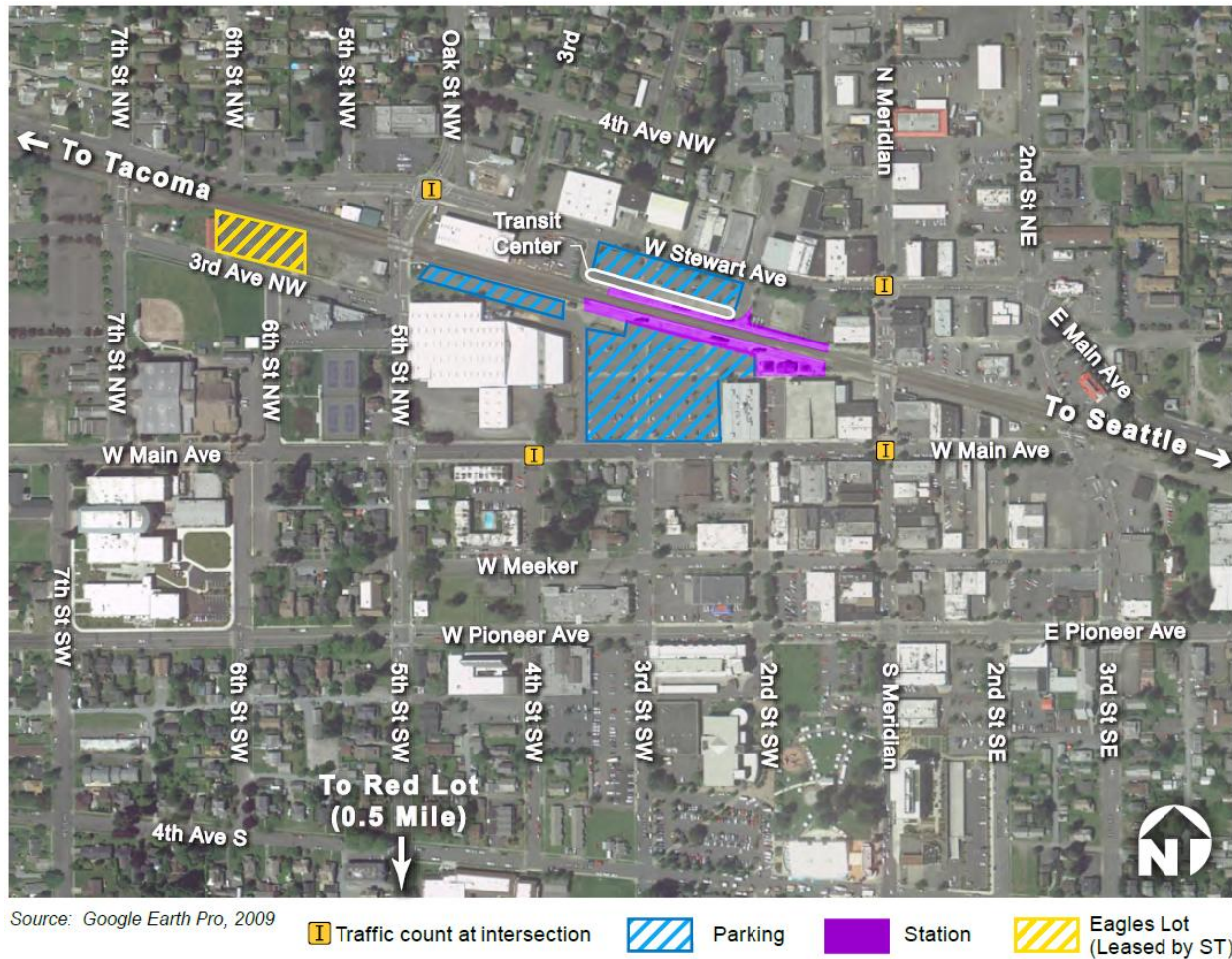
- Station parking is typically full before the last two or three morning Sounder trips. On-street parking in the immediate area also fills prior to the last Sounder trip.
- There are no level of service issues in the morning peak at intersections that serve the station.

Puyallup

The Puyallup Sounder Station is located in downtown Puyallup, bounded by W Main Avenue, 5th Street NW, W Stewart Avenue, and Meridian Street N.

Sounder trains depart each weekday morning from Puyallup northbound to Seattle at 5:07, 5:47, 6:12, 6:37, 7:02, 7:32, and 8:12 a.m. and southbound to Tacoma at 6:49 and 7:29 a.m. Figure 2-5 shows the location of Puyallup Station.

Figure 2-5: Puyallup Station (131 W Main Street)



There are 640 total parking stalls, including 66 stalls in the “Eagles Lot” (on 3rd Avenue NW, west of 5th Street NW), 219 leased parking stalls (in the Puyallup Fair’s “Red Lot” approximately ½ mile south of the station, located on 5th Street SW between 7th Avenue SW and 9th Avenue SW), five bicycle rack spaces and 20 bicycle lockers (with a 40-bicycle capacity) available. There is space available north and south of the commuter rail platforms for up to 38 vehicles at any one time for passenger drop-off and pick-up.

Transit Connections

Puyallup Station is served by an ST Express bus route and a number of PT bus routes. There are also a number of additional PT bus routes in the vicinity of the station. There is an off-street transit center on the north side of the station. Changes in transit service made since 2010 are noted in *italics*. *Due to the defeat of Proposition 1 ("PT Tomorrow") in February 2011, service reductions were implemented in June and October 2011 affecting service to Puyallup Station. All special event services were eliminated.*

ST Express Route 578 serves the Puyallup, Sumner and Auburn Stations as a midday and evening/night extension of ST Express Route 577 from Federal Way to Seattle. The service supplements Sounder by providing a fast service between these stations and downtown Seattle in the off-peak times when Sounder does not operate. It also provides peak period, off peak direction (southbound in the morning, northbound in the afternoon) service between Puyallup and Tacoma (Tacoma Dome Station and downtown Tacoma).

PT Route 400 provides service between South Hill, Puyallup (including the Red Lot and Puyallup Station), Tacoma Dome Station, and downtown Tacoma. Peak period service is approximately every 30 minutes with midday service every 60 minutes. In the morning, the northbound schedule replicates the service between South Hill Mall Transit Center and the Puyallup Station formerly provided by PT Route 495. Trips are timed for connections to the northbound Sounder trips.

PT Route 402 connects Hidden Village in Spanaway, SW Puyallup, Puyallup Station and the Federal Way Transit Center approximately every 30 minutes from about 5:00 a.m. to 9:00 p.m. The Sounder schedule is shown on the bus timetable and there are good transfer connections to most of the Sounder trips in the morning. For return trips in the afternoon, there is generally a 15-20 minute wait for the bus. *Service on PT Route 402 has been significantly reduced from service approximately every 30 minutes to 60 minutes and later evening trips have been eliminated. The revised service provides only one good morning northbound connection and two or three good afternoon southbound connections to Sounder.*

PT Route 409 connects the 72nd Street Transit Center, Puyallup, Sumner and the Sumner Industrial area. This route has service every 30 minutes in the peak period with service every 60 minutes midday. The transfers are coordinated best at the Sumner Station (the Puyallup Station Sounder schedule is not in the timetable) but there are some good transfer connections to and from the west with 5-10 minute waiting times in the morning (however, two bus trips have the same arrival time as the Sounder departure) and 15-20 minute transfer times in the afternoon. *Similar to many PT routes, this route now has significantly less service. Service in the peak period is now every 60 minutes and the span of service has been reduced, notably with the elimination of the first two eastbound trips in the morning (both of which made good connections to Sounder). There are now few good connections between Route 409 and Sounder and the Sounder/Route 409 schedule coordination insert has been dropped from the public timetable.*

PT Routes 413, 446 and 490 are in the general vicinity of Puyallup Station but do not serve the station. *These three routes have been eliminated.*

PT Route 495 connects the South Hill Mall Transit Center to Puyallup Station (including the Red Lot) with seven morning northbound trips and seven afternoon southbound trips, all scheduled for good transfers. *The morning service on this route has been eliminated. See note for PT Route 400.*

Origin and Destination

Two hundred sixty-four of the passengers who boarded at Puyallup Station were surveyed one morning during the first week of November 2010. Table 2-15 shows the city of origin for the passengers surveyed. Of these 264 passengers, 81% disembarked at King Street Station and 14% at Tukwila Station.

Table 2-15: Puyallup Passenger City of Origin

City	Boardings	% of Boardings
Eatonville	5	2
Graham	16	6
Puyallup	204	78
Spanaway	11	4
Tacoma	14	5
Other	14	5
TOTAL	264	100

Rider Survey Information

Table 2-16 summarizes the station arrival access mode data from the passenger surveys.

Seventy-three percent of the passengers who returned surveys drove themselves to the station on that day. An additional 12% of passengers were dropped off that day.

Table 2-16: Puyallup Sounder Access

Mode	% of Arrivals
Drive	73
Drop-off	12
Carpool	3
Feeder Transit	6
Bike	1
Walk	4
Other/Sounder Reverse	1
TOTAL	100

Station Area Arrival Access Mode

Arrival mode information was gathered by direct observation at the station on the morning of November 2, 2010 between 4:45 and 8:15 a.m., which was just after the departure of the last train. A total of 1,062 arriving passengers were observed. Table 2-17 summarizes the station arrival mode data.

Table 2-17: Puyallup Arrival Mode

Mode	Arrivals	% of Arrivals
Auto	586	55.2
Feeder Transit	146	13.7
Bicycle	19	1.8
Drop-off	104	9.8
Walk	201	18.9
Train	6	0.6
TOTAL	1,062	100.0

Observations in the Field

Although the observation data indicates that just over 55% of arriving passengers drove themselves to the station, the high number of walk-up passengers observed could be due to passengers driving to the station but parking off-site after the main parking lot was full. This also may explain the difference between the modes reported on the rider survey and the

observed modes. The north lot was full shortly after the fifth northbound train departed at 7:02 a.m.

The Puyallup Fair's Red Lot, which opened in October 2009 for station patrons, had only six cars in it at the end of the observation period in fall 2010. *As of October 1, 2011, the Cornforth Campbell parking lot is no longer available to ST commuters due to time limits on parking, and commuter rail parking was moved to the Red Lot. By early 2012, use of the Red Lot increased to approximately 150 vehicles per day.*

Traffic Counts

Four intersections near the station (see Figure 2-5) were counted between 6:30 and 8:30 a.m. on November 2, 2010, the same day station arrival mode split observations were recorded.

The 5th Street NW/W Stewart Avenue intersection is signalized with left turn lanes on all four legs and right turn bypass lanes in the eastbound and westbound directions on W Stewart Avenue. There are no traffic issues at this intersection in the morning peak hour (7:10 to 8:10 a.m.).

The N Meridian Street/W Stewart Avenue intersection is signalized. N Meridian Street is one-way southbound. There are no traffic issues at this intersection in the morning peak hour (7:30 to 8:30 a.m.).

The 4th Street SW/W Main Avenue intersection is unsignalized and W Main Avenue traffic is not required to stop. There is no north leg at the intersection. There are no traffic issues at this intersection in the morning peak hour (6:55 to 7:55 a.m.).

The Meridian Street N/W Main Avenue intersection is signalized. Meridian Street N is one-way southbound. There are no traffic issues at this intersection in the morning peak hour (7:20 to 8:20 a.m.).

Jurisdiction Goals and Policies

The Puyallup Station is designated Central Business District and Central Business District Core by the City's Comprehensive Plan and zoning code. The PSRC has designated the Puyallup downtown area, including the station, as a Regional Growth Center.

Puyallup Comprehensive Plan. The Comprehensive Plan was first adopted in 1991. Since that time, the plan has been updated annually. One of the main goals of the plan is to create a multimodal approach to transportation, focusing on walkway, bikeway, and transit systems in addition to roadways (City of Puyallup 1994). Per the GMA, Puyallup is scheduled to update its Comprehensive Plan by June 30, 2015.

Specific goals, policies and objectives include:

Land Use Element

- *II.1.b: Focus multi-family housing, large scale developments, and taller buildings within the City's two Regional Growth Centers on South Hill and Downtown.*
- *II.7: In order to stimulate employment and residential development, coordinate land use and transportation planning efforts to functionally unite the City's two Regional Growth Centers and the Meridian corridor.*
- *V.2: Focus new population and housing growth within Regional Growth Centers and other areas with prioritized infrastructure financing.*
- *VI.1.g: Promote mixed-use projects integrating moderate and high density residential uses with commercial uses in areas designated for pedestrian oriented commercial, limited commercial, and automobile oriented commercial, especially within the City's two regional growth centers. Mixed-use developments including a residential component within pedestrian oriented commercial (POC) areas should be subject to height, bulk, and building design standards with no density limitations imposed.*
- *X.2.a: Encourage commercial development and redevelopment to be focused into compact centers with interrelated functions and discourage further strip commercial development.*
- *XVI: Promote mass transit and accommodate individuals who rely upon bus and/or commuter rail by assuring a mix of uses near to the commuter rail station that serve commuter needs and complement each other.*
- *XVI.4: Exclude new automobile related uses. The sale, service or maintenance of automobiles is unrelated to the daily shopping needs of individuals relying primarily on mass transit, does not reflect the day to day needs of households living in the Commuter Rail Station Center and downtown area, and interferes with the retail clustering opportunities.*
- *XVI.4.a: Prohibit primary use surface level parking lots (i.e., lots that are not associated with a specific use and site) in the Commuter Rail Station Center and downtown area.*
- *XVII: Through public infrastructure investments and streamlining the development review process, encourage development of residential and employment densities downtown that are sufficient to support transit service.*

Transportation Element

- *I.6.a: The City should encourage Pierce Transit to increase the availability of transit, including the frequency of service and the number of bus routes, especially serving transit hubs in downtown Puyallup (i.e., the Sounder Station), and on South Hill (i.e., the existing transit center and future Bus Rapid Transit hub).*

- *1.6.b: The City should cooperate with transit providers, including Pierce Transit and the Regional Transit Authority, to encourage provision of facilities and services that make multi-modal travel more convenient.*
- *1.6.h: The City should implement facilities which favor transit and other high occupancy vehicles at congested intersections where appropriate, such as the bus rapid transit system identified in the LIFT [Local Infrastructure Financing Tool] program.*
- *Goal V: A wide range of local and regional transit services to meet the needs of present and future residents should be developed.*
- *V.3.a: The City acknowledges that Sound Transit has primary responsibility for providing commuter rail service. The City shall cooperate with Sound Transit in siting commuter rail stations within the UGA [Urban Growth Area], as appropriate, and expanding station facilities and services, as needed.*

Downtown Revitalization Neighborhood Plan

- *1.4.d: The City shall encourage development of structured parking and transit-oriented development which will focus growth within the Growth Center.*
- *IV.4.a: The City shall continue coordinating with Sound Transit to promote the use of rail commuting while addressing ongoing issues including parking, reverse commute opportunities, pedestrian connections and bolstering local businesses.*
- *IV.4.c: The City shall encourage shuttle service connecting the Sound Transit Station and other transit hubs with future bus rapid transit service, downtown destinations such as the Western Washington Fairgrounds, and South Hill destinations such as Pierce College, the South Hill Business & Technology Center, and other employment and retail sites.*
- *IV.4.d: In order to encourage economic development, the City shall work with Sound Transit to incorporate the parking facility construction facilitated by passage of Sound Transit 2 ballot measure into transit-oriented mixed use parking developments dispersed in the downtown area, rather than into one large structure.*
- *IV.5.b: The City shall require installation of bicycle racks on the periphery of public parking areas, at major downtown destinations (e.g., the library, transit center, etc.), and where feasible on sidewalks. Where possible, bike racks shall be located in covered areas, or bike covers shall be provided. Building and business owners shall be encouraged to provide bike lockers, showers, and other facilities that support employee bicycle commuting.*

Puyallup Transportation Plan. In 2000, the City began the process to update its Transportation Plan, the foundation of the Transportation Element (City of Puyallup 2000). In 2002, additional amendments were incorporated into the annual amendment of the City's Transportation Element based on work that came from the City's updated Comprehensive Transportation Plan. The Plan includes CTR goals.

Downtown Parking Management Plan. The City is addressing strategies for appropriately managing parking facilities in the Central Business District of downtown Puyallup. Planning staff are working closely with stakeholders to develop a comprehensive vision and overall plan for managing parking demand and supply in this sub-area. Preliminary goals were presented to the Planning Commission on May 12, 2010. In the fall of 2011, the City implemented time limits and use policies for on- and off-street parking facilities in the city's downtown core. These efforts are being undertaken to maximize and better utilize existing facilities, channel long-term parking demands into off-street parking lots, and to better provide for alternative transportation modes.

Access Deficiency Assessment

Station Description and Major Barriers:

- The current at-grade crossings to the Puyallup Station limit immediate pedestrian access to and from the north. Otherwise, the surrounding Puyallup street network and topography provides relatively good connectivity.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- The Sounder Passenger Access Survey indicates a significant share of pedestrian trips but no reported bicycle trips originating within the 15-minute travel shed.
- Over 1,800 employed residents are located within a 15-minute walk of the station, and over 15,000 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit E.

Feeder Transit Service Limitations (*changes in feeder transit service made since 2010 are in italics*):

- PT Routes 402 and 409 riders have wait times in the 15-20 minute range after the afternoon Sounder trip arrives at the station. *Service on PT Route 402 has been reduced to every 60 minutes and later afternoon trips have been eliminated.*
- PT Routes 413, 446 and 490 are in the general vicinity of Puyallup Station but do not serve the station. *These three routes have been eliminated. PT Route 495 was modified in October 2011 and now provides connections to afternoon trains only.*

Vehicle Access and Network Capacity:

- Parking lots near the station are full before the morning Sounder service is complete.
- Although the November 2010 surveys indicated that just over 55% of arriving passengers drove themselves to the station, the high number of walk-up passengers observed could indicate that many additional passengers drove to the station but parked off-site after the main parking lot was full. *By early 2012, use of the Red Lot increased to approximately 150 vehicles per day. PT Routes 400 and 495 provide service between the Red Lot and Puyallup Station.*
- There are no level of service issues in the morning peak at intersections that serve the station.

Tacoma Dome

The Tacoma Dome Sounder Station is located southeast of downtown Tacoma, just north of the Tacoma Dome and adjacent to Freighthouse Square. Tacoma Dome Station is currently the interim terminus for Sounder service in Pierce County. Service to South Tacoma and Lakewood will begin in Fall 2012.

Sounder trains depart each weekday morning from the Tacoma Dome Station northbound to Seattle at 4:55, 5:35, 6:00, 6:25, 6:50, 7:20, and 8:00 a.m., and in the afternoon at 4:25 and 5:00 p.m. Southbound trains from Seattle arrive in the morning at 7:08 and 7:48 a.m., and in the afternoon at 4:14, 4:49, 5:19, 5:44, 6:11, 6:39, and 7:14 p.m. Figure 2-6 shows the location of the Tacoma Dome Station.

Figure 2-6: Tacoma Dome Station (424 E 25th Street)



There are 2,283 parking stalls, 10 covered bicycle rack spaces in the garage, and 27 bicycle lockers (with a 38-bicycle capacity) available. There is space available for up to 56 vehicles at any one time for passenger drop-off and pick-up.

Transit Connections

A very busy multi-modal hub, this station is served by Sounder, Tacoma Link light rail, seven ST Express routes, six PT routes, the Olympia Express (a joint PT and Intercity Transit service) and Greyhound. Also, nearby Amtrak is planning to relocate to Tacoma Dome Station. The transit center serving ST Express buses, PT, the Olympia Express, and Greyhound is north of the commuter rail platform, and riders must walk through Freighthouse Square and between the parking garages (approximately 480 feet from the station). Tacoma Link stops across the street from Freighthouse Square, approximately 120 feet north of the station. Changes in transit service made since 2010 are noted in *italics*. *Due to the defeat of Proposition 1 ("PT Tomorrow") in February 2011, service reductions were implemented in June and October 2011 affecting service to Tacoma Dome Station. All special event services were eliminated.*

Tacoma Link connects Tacoma Dome Station through downtown Tacoma to the theater district, providing service every 10 minutes from 7:00 a.m. to 10:00 p.m. *(now service is every 12 minutes to 8:00 p.m.)* and 20 minute service before and after this time period *(now service is every 24 minutes from 5:00 to 7:00 a.m. and from 8:00 to 10:00 p.m.)*. For riders accessing northbound Sounder trips in the morning from downtown, there is no Tacoma Link to the first trip, service every 20 minutes for the next three trips, and service every 10 minutes for the last three morning trips. All of the afternoon southbound Sounder trips are met by Tacoma Link every 10 minutes.

ST Express Routes 574, 578, 586, 590, 593, 594 and 599 serve the Tacoma Dome Station. Route 599 is notable as the bus operates as an extension of Sounder to Lakewood Station. Other routes provide service to some of the Sounder markets at times and directions that Sounder does not operate, while others serve entirely separate markets. *ST Express Route 599 has been discontinued.*

Greyhound provides service to Seattle, inter-state destinations and international destinations from this station. There are four daily roundtrips to Vancouver, B.C., via Seattle and three daily round trips to Portland and beyond.

A regional service, the Olympia Express is operated jointly by PT (designated Routes 601 and 603A) and Intercity Transit (Route 603 trips). There are trips every 5-15 minutes in peak periods and approximately every 90 minutes midday. About half of the trips stop at the Tacoma Dome Station. *This service is now provided exclusively by Intercity Transit as Routes 603, 605 and 612. Total trips have been reduced from 24 in both directions to 18 northbound and 19 southbound. Twelve northbound trips serve the Tacoma Dome Station (two in the morning and all trips in the afternoon). Southbound, 11 trips serve this station (all the morning trips, a midday trip, and two additional afternoon trips).*

PT Routes 13, 14, 102, 400, 500 and 501 serve the station directly and Route 1 is very close-by.

The following describes PT routes serving this station or close-by:

- Route 1: Roy Y Park-and-Ride – Tacoma Dome Station – Downtown Tacoma – Tacoma Community College Transit Center. This route has all day service every 15 minutes except for in the early morning and after 8:00 p.m., when service is every 30 minutes. The Tacoma Dome Station is only served directly during peak periods, via a short deviation from Pacific Avenue. *This service operates from about 5:00 to 2:00 a.m. with service every 20 minutes. It does not directly serve the Tacoma Dome Station but makes a one block deviation from Pacific Avenue, which is a very short distance west of the station.*
- Route 13: Tacoma Dome Station – Downtown – N 30th St – Proctor Shopping District. Route 13 has all day service every 60 minutes in both directions from 5:40 a.m. to 6:20 p.m. *There are only a few good connections to Sounder.*
- Route 14: Tacoma Dome Station – Downtown (Dock St) – UPS – Proctor Shopping District. This route has service every 60 minutes from about 6:00 a.m. to 7:00 p.m. *This route has two good connections from Sounder in the morning and one to Sounder in the afternoon.*
- Route 41: Downtown Tacoma – Tacoma Dome Station – 72nd St Transit Center and Park-and-Ride. This is all day, bi-directional service that varies from every 20-35 minutes. Transfer times to Sounder vary from 5-20 minutes. *Service is now provided every 60 minutes in the early morning, midday and evening with peak period service approximately every 30 minutes. There are good connections to about half of the northbound morning and southbound afternoon Sounder trips. In addition, some Route 41 trips are through-routed with PT Route 11 Point Defiance trips, providing additional direct service to and from Point Defiance.*
- Route 102: Gig Harbor – Tacoma Express. This is a peak period, peak direction service with six morning and six afternoon trips. Five of the Route 102 morning trips make an acceptable connection with Sounder but only three do in the afternoon. *This route now has four morning and five afternoon trips, with all but the last morning and first afternoon trips making good connections to Sounder.*
- Route 490: South Hill – Downtown Tacoma. This route has four morning and four afternoon peak period, peak direction trips. Overall the transfer connections to and from Sounder are poor. *This route has been eliminated.*
- Route 500: Downtown Tacoma – Federal Way and Route 501 Milton – Federal Way. All trips serve the Tacoma Dome Station. These routes are not particularly relevant to Sounder service.

Amtrak, currently located at 1001 Puyallup Ave, plans to move its service to a shared station facility with Sounder at Tacoma Dome Station. No date has been set for this relocation.

Origin and Destination

One hundred forty-seven of the passengers who boarded at Tacoma Dome Station were surveyed one morning during the first week of November 2010. Table 2-18 shows the city of origin for the passengers surveyed. Of these 147 passengers, 66% disembarked at King Street Station, 25% at Tukwila Station, and 9% at Kent Station.

Table 2-18: Tacoma Dome Passenger City of Origin

City	Boardings	% of Boardings
Gig Harbor	11	7
Olympia	7	5
Lakewood	5	3
Spanaway	7	5
Tacoma	92	63
University Place	13	9
Other	12	8
TOTAL	147	100

Rider Survey Information

Table 2-19 summarizes the station arrival access mode data from the passenger surveys.

Table 2-19: Tacoma Dome Sounder Access

Mode	% of Arrivals
Drive	81
Drop-off	8
Carpool	3
Feeder Transit	3
Bike	1
Walk	2
Other/Sounder Reverse	2
TOTAL	100

Station Area Arrival Access Mode

Arrival mode information was gathered by direct observation at the station on the morning of November 4, 2010 from 4:30 to 8:00 a.m., when the last train departed. A total of 2,147 arriving passengers were observed. Table 2-20 summarizes the station arrival mode data.

Table 2-20: Tacoma Dome Arrival Mode

Mode	Arrivals	% of Arrivals
Auto	1,651	76.9
Feeder Transit	255	11.9
Bicycle	18	0.8
Drop-off	113	5.3
Walk	12	0.6
Train	84	3.9
Light Rail	14	0.6
TOTAL	2,147	100.0

The large number of parking spaces available and the fact that this is currently the southern terminus of the Sounder line contribute to the very large passenger demand at this station. More than 76% of passengers arriving at the Tacoma Dome Station drove themselves. There also were a significant number of feeder transit arrivals at the station.

Over 80% of the passengers who returned surveys drove themselves to the station on that day. Eight percent were dropped off. Arrivals by carpool, feeder transit, bike, walk, and other were relatively similar (between 1 and 3% each).

Observations in the Field

The east end of the station platform is accessible to East G Street south of Freighthouse Square, but it was not observed directly. After the observation period, 20 cars were counted parked along East G Street south of the railroad tracks. Because it is not clear whether these vehicles were driven by station users, they are not included in the station arrival estimates.

At the end of the observation period, the two station parking garages had the following available parking spaces (combined):

- 223 Unrestricted
- 12 Accessible
- 3 Employee Only
- 58 Short Term
- 1 Vehicle over 7'2" only

A Pierce Transit operations staff member present at the station bus platform on Puyallup Avenue for most of the observation period commented that passenger drop-off activity sometimes occurs in the bus area and can cause bus queuing problems. Spaces along E 25th Street are commonly used for drop-off and pick-up.

Traffic Counts

Intersections with traffic counts are shown on Figure 2-6. The East D Street/Puyallup Avenue intersection is signalized, with left turn lanes on three of the four legs (all but southbound). There are no traffic issues at this intersection in the morning peak hour (7:10 to 8:10 a.m.).

The East G Street/Puyallup Avenue intersection is signalized, with no street to the north. The north side of Puyallup Avenue is occupied by a business's parking/loading area, but there is no signal head controlling traffic entering the intersection from the business. Buses accessing the Tacoma Dome Station use this intersection extensively. There are no traffic issues at this intersection in the morning peak hour (7:20 to 8:20 a.m.).

The East D Street/E 25th Street intersection is signalized, with no left-turn lanes marked on any approach. Traffic volumes are very low and there are no traffic issues at this intersection in the morning peak hour (6:35 to 7:35 a.m.).

The East G Street/E 25th Street intersection is signalized. The light rail/streetcar tracks along E 25th Street transition from median-running east of East G Street to north-side running west of East G Street. There are no traffic issues at this intersection in the morning peak hour (6:55 to 7:55 a.m.).

Jurisdiction Goals and Policies

The Tacoma Dome Station is within the Urban Center Mixed-Use in the Tacoma Dome zone, an area characterized by dense mixed-use development. The station is also within the Tier I – Primary Growth Area of the Urban Growth Tier, which serves as the focus of growth for the next six years (City of Tacoma 2010). The PSRC has designated the downtown area, including the station, as a Regional Growth Center.

Tacoma Comprehensive Plan. The Comprehensive Plan was first adopted in 1975. At that time, it was entitled the Land Use Management Plan: Goals and Policies for Physical Development. The 2010 Annual Amendment to the Comprehensive Plan was adopted by the City Council on June 15, 2010, per Amended Ordinance No. 27892. Per the GMA, Tacoma is scheduled to update its Comprehensive Plan by June 30, 2015.

The applicable goals of the Tacoma Comprehensive Plan are to:

- *1: Achieve a balanced pattern and variety of growth and development that occurs in an orderly, timely, and desirable fashion.*
- *2: Support a multimodal transportation system that efficiently moves people and goods with optimum safety and speed, maximizes the conservation of energy and minimally disrupts the desirable features of the environment.*

Specific policies include:

- *LU-GGD-3 Concentrated Development – Growth and development throughout the urban area should be regulated, stimulated, and otherwise guided toward the development of compact concentrated areas to discourage sprawl, facilitate economical and efficient provision of utilities, public facilities and services, and expand transportation options to the public.*
- *LU-MUCD-5 Public Transit Support – Give maximum consideration for transit user convenience in centers including pullout lanes, fully developed transit stops, and, where appropriate, park and ride and multimodal facilities.*
- *LU-MUCD-6 Compactness – Centers must remain compact enough to increase densities, facilitate economical and efficient provision of utilities, public facilities and services, and support more walking, bicycling, and transit use.*
- *LU-MUCC-1 Public Transit Support – Integrate major collection points for local public transit within designated community centers.*
- *LU-RDHI-1 Locate Near or Within Regional Activity Centers – High-density residential developments should be located near and within regional mixed-use centers where utilities, transit facilities, employment opportunities and commercial conveniences and services are available to accommodate developments of this nature.*
- *LU-RDHI-7 Special Amenities – Encourage innovations in the development of high intensity residential areas to include such conveniences as grade-separated pedestrian crossings, public transit connections and mixed-use development within high-rise structures in order to meet the needs of residents in these areas.*
- *T-LUT-1 Land Use Considerations – Development, expansion, or improvement of transportation facilities should be coordinated with existing and future land use patterns and types of development.*

- *T-LUT-2 Land Use Patterns – Encourage land use patterns and developments, especially in mixed-use centers, that support non-single occupancy vehicle travel, increase community access, improve intermodal connectivity, and encourage short trips easily made by walking or bicycling for recreation and commuting.*
- *T-LUT-9 Transit Oriented Development – Encourage and promote transit-oriented development (TOD) and provide incentives for development that includes specific TOD features.*
- *T-MS-4 Transit Planning – Support future transit planning among local and regional governmental agencies to improve the reliability, availability, and convenience of transit options.*

Tacoma Mobility Master Plan. The City of Tacoma Mobility Master Plan was created in 2010. The Tacoma Mobility Master Plan provides a vision, objectives, and an implementation plan for how the City of Tacoma can improve conditions for bicycling and walking in Tacoma over the next 20 years. The plan envisions an interconnected bicycle and pedestrian network that provides safe routes to neighborhoods, schools, recreational public facilities, business districts, transit centers and environmental features. Multi-modal connections and CTR policies are included (City of Tacoma 2010). Near the station, bicycle lanes are proposed along East D Street and Puyallup Avenue, with a bicycle boulevard proposed along SR 509 with a connection to Pacific Avenue. A trail is also proposed along East D Street.

South Downtown Subarea Plan and EIS. The City of Tacoma, along with the University of Washington, Tacoma, is preparing a subarea plan for areas around the Tacoma Dome, Brewery District, Thea Foss Waterway, and the University of Washington Tacoma campus. The Subarea Plan and EIS will identify and prioritize necessary infrastructure improvements; plan for parks, trails, and open space; prioritize transportation investments including light rail, parking, pedestrian and bike improvements; develop potential funding strategies; and pre-approve up to 30 million square feet of new development space. Scoping for the EIS was completed in December 2011. The City anticipates releasing the Draft Plan and EIS in fall 2012.

Commute Trip Reduction. The Tacoma City Council adopted the CTR Plan in July 2007 (Resolution No. 37220) and adopted the CTR Ordinance into the Tacoma Municipal Code, Chapter 13.15, in December 2008 (Ordinance No. 27771). The CTR Plan provides guidelines for the City and major employers affected by the State law to implement effective strategies to achieve the goals of 10% reduction in drive-alone trips and 13% reduction in vehicle miles traveled by 2011.

In addition to the mandated program activity, the City of Tacoma is participating in a voluntary pilot program encouraged and funded by the State, whereby downtown Tacoma is designated as a Growth and Transportation Efficiency Center (GTEC). More aggressive CTR strategies will be implemented within the GTEC, involving selected target audiences besides the CTR-affected employers. Expected outcomes of the pilot program are the reduction of auto-dependent trips and the alleviation of the burdens on State highway facilities within and between GTECs. The GTEC program is effective from July 2008 through June 2012 (City of Tacoma 2010).

Access Deficiency Assessment

Station Description and Major Barriers:

- The current at-grade crossings and adjacent topography to the Tacoma Dome Station limit immediate pedestrian access from the south. Otherwise, the surrounding Tacoma street network provides relatively good connectivity.
- The Tacoma Dome Station is located within an area of almost exclusively non-residential uses.
- I-5, I-705, and the existing BNSF Railway line are direct barriers to pedestrian and bicycle access to the station.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- The Sounder Passenger Access Survey indicates no pedestrian trips and very few bicycle trips originating within the 15-minute travel shed.
- Only 130 employed residents are located within a 15-minute walk, while over 18,000 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit F.

Feeder Transit Service Limitations (*changes in feeder transit service made since 2010 are in italics*):

- ST Express Routes 590/593/594 compete with Sounder by providing peak hour/direction service from the Tacoma Dome Station to downtown Seattle.
- There is no Tacoma Link service for the first morning Sounder trip.
- PT Route 102 does not provide connections for two of the morning northbound and five of the afternoon southbound Sounder trips. *This route now provides good connections with all but the last morning and first afternoon Sounder trips.*
- *Modifications and reductions to PT routes serving Sounder stations were implemented in October 2011 due to the defeat of Proposition 1 ("PT Tomorrow"). This included eliminating PT Route 490.*

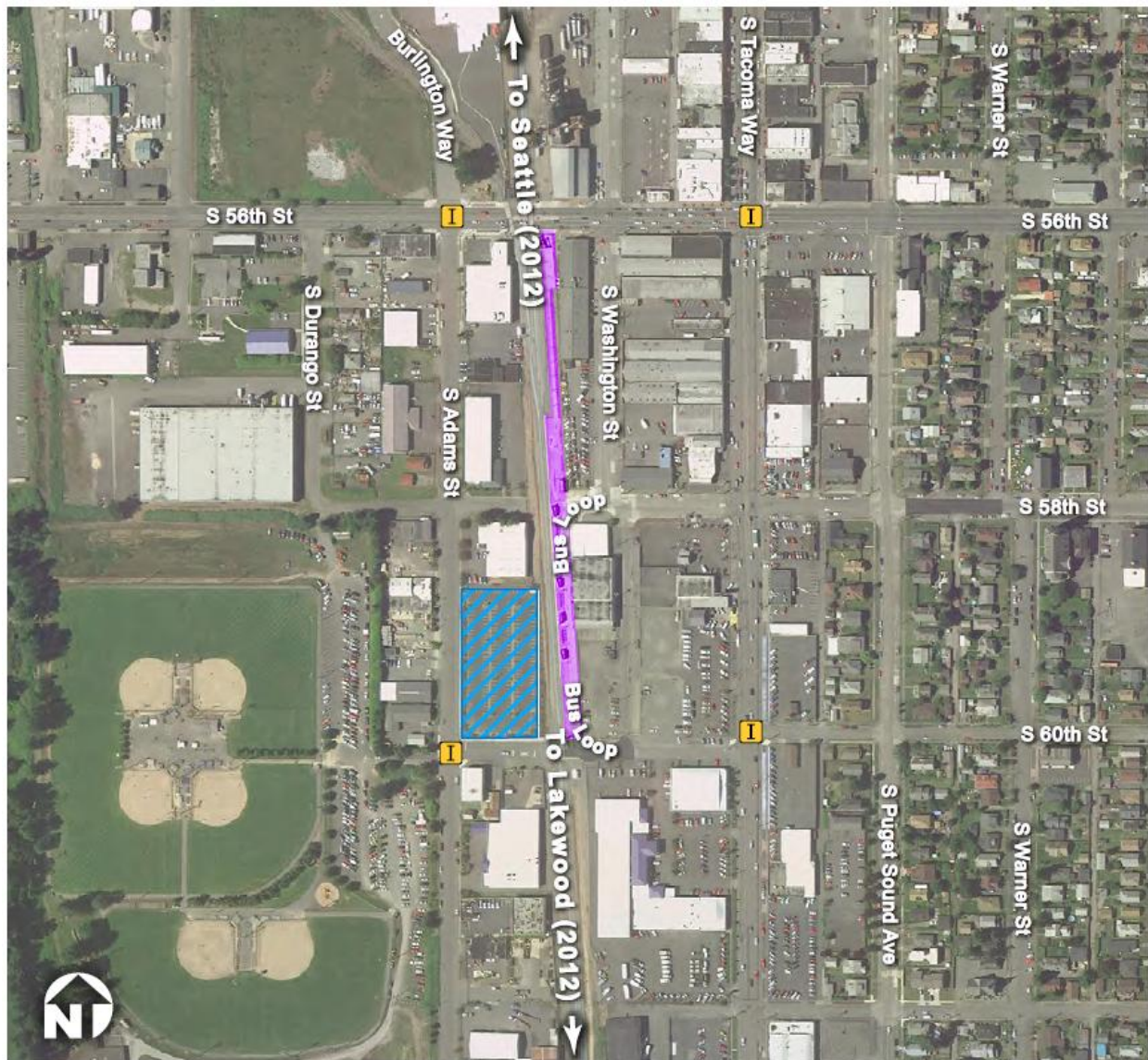
Vehicle Access and Network Capacity:

- There are no level of service issues in the morning peak at intersections that serve the station.

South Tacoma

The South Tacoma Sounder Station, which has been constructed, will be served by Sounder when service to Lakewood begins in 2012. The station is located in southwest Tacoma, south and west of the major intersection of S 56th Street and South Tacoma Way. Figure 2-7 shows the location of the South Tacoma Station.

Figure 2-7: South Tacoma Station (5650 S Washington Street)



Source: Google Earth Pro, 2009

 Traffic count at intersection

 Parking

 Station

There are 220 parking stalls in the surface parking lot, 16 bicycle rack spaces, and four bicycle lockers (with an eight-bike capacity) available. There is space available for up to 22 vehicles at any one time for passenger drop-off and pick-up.

Transit Connections

The station is served by ST Express Route 593 through the Tacoma Dome Station to downtown Seattle. It is also served by PT Routes 53 and 59 via S 56th Street (with stops approximately 4,750 feet/0.9 mile and 1,580 feet/0.3 mile from the station, respectively) and PT Route 300 via South Tacoma Way (approximately 530 feet from the station). Changes in transit service made since 2010 are noted in *italics*. *Due to the defeat of Proposition 1 ("PT Tomorrow") in February 2011, service reductions were implemented in June and October 2011 affecting service to Tacoma Dome Station. All special event services were eliminated. PT Route 53 has modified routing but still serves the South Tacoma Station vicinity. PT Route 59 has been eliminated but only provided two morning and two early afternoon round trips, the latter of which were not within operating hours of Sounder. PT Route 300 remains and has the same routing but has a reduced span of service that eliminated the first two morning trips (which had potential connections to Sounder) and two late afternoon trips.*

Origin and Destination

Because riders of ST Express Route 593 disembark at Tacoma Dome Station, rider surveys from the South Tacoma Station were captured on the train from those boarding at Tacoma Dome Station.

Station Area Arrival Access Mode

Field data and observations were not collected for the South Tacoma Station because it was not open for Sounder service at the time of the surveys (November 2010).

Traffic Counts

Intersections with traffic counts are shown on Figure 2-7. There are no traffic issues at these intersections during the morning peak hour (7:30 to 8:30 a.m.).

The S Tacoma Way/S 56th Street intersection is signalized, with left turn lanes on all four legs. Traffic volumes are moderate, as S 56th Street is a primary east-west commute route for the area.

The South Tacoma Way/S 60th Street intersection is unsignalized and South Tacoma Way traffic is not required to stop. The east and west legs are offset by about 40 feet. Traffic volumes are very low.

The S Adams Street/S 56th Street intersection is unsignalized and S 56th Street traffic is not required to stop. S 56th Street has a center turn lane. The heavy volumes on S 56th Street could result in some delay for northbound vehicles desiring to turn left and go west. However, the volume of traffic making this movement in the morning peak is very low, and the center turn lane will allow such vehicles to use separate gaps in eastbound and westbound traffic to complete the turn.

The S Adams Street/S 60th Street intersection is unsignalized and S Adams Street traffic is not required to stop. The west leg of the intersection is an entrance to the South End Recreation Area. Traffic volumes are very low.

Jurisdiction Goals and Policies

The South Tacoma Station is designated Heavy Industrial and lies within the South Tacoma Manufacturing/Industrial Center overlay.

The applicable goals and policies for the Comprehensive Plan are described in the Tacoma Dome Station section.

Tacoma Mobility Master Plan. Approximately 1,580 feet/0.3 mile west of the station, an extension to existing bicycle lanes is proposed along S Tyler Street (north of S 62nd Street) and along S 56th Street. A bicycle boulevard is proposed along S 54th Street (approximately 1,050 feet/0.2 mile northeast of the station). The existing Water Ditch Trail is located approximately 2,110 feet/0.4 mile east of the station and roughly follows S Clement Street.

Access Deficiency Assessment

Station Description and Major Barriers:

- South Tacoma Station is located in an area of mixed commercial and residential use.
- The proposed South Tacoma Community Center Campus development may improve pedestrian and bicycle connectivity to S Tyler Street, west of the station. The surrounding area street network and topography provides a relatively good connection for pedestrian and bicycle access to the station.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- Commuter rail service was not extended to South Tacoma at the time of this study; hence, there are no passenger survey data to compare to the connectivity scoring for pedestrian and bicycle access.
- 1,165 employed residents are located within a 15-minute walk and 14,444 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit G.

Feeder Transit Service Limitations (changes in feeder transit service made since 2010 are in italics):

- ST Express Route 593 and PT Routes 53, 59 and 300 currently serve the station park-and-ride. No comments can be made about feeder transit connections because Sounder was not operating at the station at the time of this study. *Modifications and reductions to PT routes serving Sounder stations were implemented in 2011 due to the defeat of Proposition 1 ("PT Tomorrow"). PT Route 53 has modified routing but still serves the South Tacoma Station vicinity. PT Route 59 has been eliminated. PT Route 300 remains and has the same routing but has a reduced span of service.*

Vehicle Access and Network Capacity:

- Currently there is parking capacity, but Sounder service had not begun at the time of this study.
- There are no level of service issues in the morning peak at intersections that serve the station.

Lakewood

The Lakewood Sounder Station, which has been constructed and will be fully operational in 2012 when Sounder service is extended to Lakewood, is located in southern Lakewood on the north side of Pacific Highway South, east of Bridgeport Way SW. The station currently is served by ST Express buses. Figure 2-8 shows the location of the Lakewood Station.

Figure 2-8: Lakewood Station (11424 Pacific Highway SW)



Source: Google Earth Pro, 2009



Pedestrian
Bridge Project



Traffic count at intersection



Parking



Station

There are 600 parking stalls and 18 covered hooks/hangers for bicycles available in the garage. There is space available for up to 14 cars at any one time for passenger drop-off or pick-up.

Transit Connections

Bus stops are located next to and east of the station platform. Changes in transit service made since 2010 are noted in *italics*.

ST Express Routes 592/594 operate from the Lakewood Station (a few peak period trips extend to/from DuPont) to downtown Seattle. The peak period (Route 592) service varies from every 7-15 minutes with midday (Route 594) service every 30 minutes. The 592 trips bypass Tacoma but the 594 trips stop at the Tacoma Dome Station.

ST Express Route 599 is a bus-operated Sounder route extension from the Tacoma Dome Station to Lakewood Station. There are timed transfers for all Sounder trips and no fares are collected on the buses but riders must have a valid transfer, pass, ORCA card, or Sounder ticket. Service on Route 599 will be cut back once Sounder service to Lakewood Station begins in 2012. *This route has been eliminated.*

PT Route 300 travels between Lakewood Station and the Lewis-McChord Joint Base. There is service every 30 minutes during the day and every 60 minutes in the evening. *As noted in the South Tacoma Station section, the first and last two trips of this route have been eliminated.*

The Olympia Express from Olympia to Tacoma is provided jointly by PT (trips designated 601 and 603A) and Intercity Transit (Route 603 trips). There are trips every 5-15 minutes in peak periods and roughly every 60 minutes midday. All trips stop at the Lakewood Station. *The Olympia Express is now operated exclusively by Intercity Transit as Routes 603, 605 and 612; all trips still stop at Lakewood Station. Total trips have been reduced from 24 in both directions to 19 southbound and 18 northbound. The service frequency varies throughout the day.*

Other PT routes operate in the vicinity and may be included in future modifications to serve the Lakewood Station. *For example, PT Route 206 from Lakewood Transit Center to Madigan Hospital operates through the intersection of Bridgeport Way and Pacific Highway. PT Route 51, connecting UPS, Cheney Stadium, and the Lakewood Transit Center, has already been extended to serve the Lakewood Station directly, providing service every 60 minutes from about 6:00 a.m. to 7:30 p.m.*

Origin and Destination

Twenty eight of the passengers who boarded at Lakewood Station were surveyed one morning during the first week of November 2010. Table 2-21 shows the city of origin for the passengers surveyed. All of these passengers disembarked at Tacoma Dome Station.

Table 2-21: Lakewood Passenger City of Origin

City	Boardings	% of Boardings
Tacoma	7	25
Spanaway	2	7
Olympia/Lacey	6	21
DuPont	7	25
Lakewood	3	11
Other	3	11
TOTAL	28	100

Station Area Arrival Access Mode/Rider Survey Information

No field data or observations were collected for the Lakewood Station because it was not open for Sounder service during the time of the station surveys (November 2010). The rider survey indicated that of the 28 passengers surveyed, 68% arrived by auto and parked at the station and 21% arrived by feeder transit. Of these feeder transit riders, half parked at the DuPont Park-and-Ride.

Traffic Counts

The Pacific Highway SW/parking lot driveway intersection (see Figure 2-8) is signalized, and there is no southeast leg at the intersection. There are no traffic issues at this intersection in the morning peak hour (7:30 to 8:30 a.m.)

Jurisdiction Goals and Policies

The Lakewood Station is within the Transit Oriented Commercial zone within the Lakewood Station District and is designated as Corridor Commercial by the City's Comprehensive Plan.

The station lies within the area designated by the PSRC as a Regional Growth Center.

Lakewood Comprehensive Plan. Lakewood adopted its initial comprehensive plan in 2000 as a new city and updated the plan in 2004. In addition, the plan is amended yearly as provided for in the state GMA. As part of the plan's land-use element, the City created the Lakewood Station District and an urban design framework for the district (City of Lakewood 2010). The Lakewood Station District is also part of Lakewood's designated urban center under the *Vision 2040* plan (PSRC 2009). Per the GMA, Lakewood is scheduled to update its Comprehensive Plan by June 30, 2015.

Lakewood Station District: Once Sounder service reaches Lakewood in 2012, the station will act as the multi-modal commuter hub of Lakewood and the southern terminus of Sound Transit's commuter rail service. This district will provide a mixture of intensive land uses (office, retail and high density residential), a pedestrian-oriented urban environment, and activities supportive of regional transportation. The plan provides incentives to encourage urban growth over a period of time.

The applicable goals and policies of the Lakewood Comprehensive Plan are:

GOAL LU-25: Promote the Lakewood Station area as the multi-modal commuter hub of Lakewood.

- *LU-25.1 – Coordinate with affected agencies to facilitate the development and operation of the Lakewood Station area as a multi-modal commuter hub.*
- *LU-25.2 – Foster the Lakewood Station area's role as a transit-oriented development district.*

- *LU-25.3 – Seek ways to acquire additional public and semi-public open space including the creation of mechanisms for bonus densities in return for provision of open space and other public amenities.*
- *LU-25.4 – Provide incentives for redevelopment of the Lakewood Station area to capitalize on growth and visibility associated with the commuter rail station.*

GOAL LU-26: Promote an interactive mixture of activities around the Lakewood Station that focus on the station’s regional access.

- *LU-26.1 – Coordinate and promote the development of the area around the Lakewood Station to create a distinctive urban node that provides for a rich mixture of uses including regional offices, major institutions, high-density urban residences, neighborhood businesses, and open space.*

GOAL LU-27: Develop an urban design framework to guide physical development of the Lakewood Station district.

- *LU-27.1 – As part of the Lakewood Station sub-area plan, develop design guides and a detailed urban design framework plan for the Lakewood Station District, coordinating public and private development opportunities (see GOAL UD-9).*
- *LU-27.2 – Prioritize completion of existing street grid to ensure connectivity throughout the Lakewood Station district.*
- *LU-27.3 – Create additional public and semi-public open space opportunities to serve residents, employees, commuters and visitors in the Lakewood Station district.*
- *LU-27.4 – Improve pedestrian and vehicular connections across the railroad tracks, Pacific Highway Southwest, and I-5.*

GOAL UD-9: Create a livable, transit-oriented community within the Lakewood Station district through application of urban design principles.

- *UD-9.1 – Provide for pedestrian and bicycle connectivity within the Lakewood Station district to the commuter rail station.*
- *UD-9.2 – Identify the opportunities for additional public/semi-public green space in the Lakewood Station district. (see Policy LU25.3 regarding bonus densities).*
- *UD-9.3 – Improve identified civic boulevards, gateways, and green streets within the Lakewood Station district to provide a unifying and distinctive character.*
- *UD-9.4 – Establish the intersection of Pacific Highway Southwest and Bridgeport Way as a major gateway into the city and develop a landscaping treatment to enhance the city’s image at this gateway.*
- *UD-9.5 – Develop a sub-area plan to serve as the framework plan for developing the Lakewood Station district. Incorporate site and architectural design measures to coordinate consistency of private and public development.*

Other changes envisioned within the Lakewood Station district include:

- Strengthening and completion of the street grid north of St. Clare Hospital and east of Bridgeport Way
- Developing an open space corridor adjacent to the railroad tracks as part of a greater citywide system

Some of the specific urban design actions that may occur as the Lakewood Station district develops over the next 20 years are:

Landmarks/Activity Nodes: The Bridgeport Way intersection with I-5, the most visible access point into the city, would be redeveloped and landscaped into a graceful entrance on both sides of Pacific Highway SW. The commuter rail station and related architecture, including the garage structure, could present a memorable regional image, while simultaneously functioning to mediate the transition in scale between the station and the neighborhood to the north.

Civic Boulevards: Bridgeport Way, Pacific Highway SW, and 112th Street would receive various safety and image-oriented streetscape improvements, including landscaped medians, improved crosswalks, and undergrounding of utilities.

Green Streets: Several important pedestrian connections would be made along existing streets to increase pedestrian interest and safety, including curb ramps, street trees, crosswalks, and lighting.

Transit-Oriented Commercial Zoning. Following adoption of its comprehensive plan, Lakewood instituted new citywide zoning in 2001. The Lakewood Station District contains several different zoning districts. The Transit-Oriented Commercial (TOC) zoning district is specific to the station district and reflects the commercial corridor within that area. The intent of the zone is to create “*an interactive mixture of uses which focus on regional transportation networks while providing for urban design, people orientation, and connectivity between uses and transportation routes*” (LMC 18A.30.510). In addition to commercial uses, multifamily housing is also allowed within the zone at a density of 54 dwelling units per acre, as either a large, stand-alone development or combined with ground-floor commercial uses.

The area north of the tracks and south of St. Clare Hospital is zoned Multifamily 3, which also provides for density of up to 54 dwelling units per acre. It differs from the TOC provisions in that it allows smaller stand-alone developments and does not integrate ground-floor commercial uses. The area currently contains older, largely outdated multifamily housing which may be suited for redevelopment. PT is planning its local connection between the Lakewood Towne Center transit station and the Sounder station through this area. However, transit service implementation and redevelopment interest is impeded by the fact that the area is currently physically separated from the station by the tracks themselves.

Non-Motorized Plan. Lakewood adopted their Non-Motorized Transportation Plan in 2009 (City of Lakewood 2009a), which identifies specific Sounder station access improvements, including a new grade-separated crossing of the railroad at Lakewood Station called the

“Lakewood Connection.” The crossing will provide more direct pedestrian and bicycle connection from Lakewood’s downtown and central neighborhoods to the commuter rail station. The bridge will be under construction in 2012. Sound Transit provided a contribution of \$1 million for the Lakewood Pedestrian Connection project.

Access Deficiency Assessment

Station Description and Major Barriers:

- Based on the current street network, both pedestrian and bicycle connectivity from neighboring land parcels north and west of the rail line to the Lakewood Station is severely limited. A grade-separated pedestrian and bicycle crossing, funded in part by Sound Transit, is planned to be constructed in 2012 and will provide significant access improvements to the station in the future.

Station Area Pedestrian and Bicycle Connectivity Assessment:

- Commuter rail service was not yet extended to Lakewood at the time of this study; hence, there are no passenger survey data to compare to the connectivity scoring for pedestrian and bicycle access.
- 316 employed residents are located within a 15-minute walk and 5,241 employed residents are located within a 15-minute bicycle ride of the station. The walk and bicycle catchment areas are shown in Appendix F, Exhibit H.

Feeder Transit Service Limitations (changes in feeder transit service made since 2010 are in italics):

- There are several ST Express (Routes 592/594 and 599) and PT (Routes 300, 601A and 603A) routes in the vicinity or serve the station park-and-ride. No comments can be made about feeder transit connections because Sounder was not operating at the station at the time of this study. *ST Express Route 599 has been eliminated. PT Routes 601A and 603A are now operated exclusively by Intercity Transit as Routes 603, 605 and 612.*
- *Modifications and reductions to PT routes serving Sounder stations were implemented in October 2011 due to the defeat of Proposition 1 ("PT Tomorrow").*

Vehicle Access and Network Capacity:

- Currently there is parking capacity, but Sounder service had not yet begun at the time of this study.
- There are no level of service issues in the morning peak at intersections that serve the station.

Chapter 3: Evaluation Criteria (Phase 4)

This chapter describes the evaluation criteria or performance measures used to evaluate potential projects for each of the eight stations in the study.

The project goals, objectives, and planning parameters set by the Sound Transit Board and local agencies provided the platform for the criteria. Throughout the study, stakeholders provided input and feedback on station issues and data collected by Sound Transit. As a result of combining this knowledge, understanding, and input, the following evaluation criteria has been used throughout the study; especially to evaluate the alternatives described in Chapter 4. As discussed in Chapter 5, Station Access Improvement Projects Evaluation, the top six criteria listed below were used to evaluate the potential improvement projects (described in Chapter 4).

Sounder Access Study Evaluation Criteria

Top 6 Criteria

- Increases ridership
- Cost effective/operation & maintenance cost
- Leverages previous investments
- Decreases travel time and increases reliability
- Partnership potential
 - Joint parking
 - Pedestrian amenities/quality of the walk
 - Bicycle programs and/or amenities
 - Transit feeder service
- Environmental benefits

Secondary Criteria

- Capital cost/increases value of investment
- Connectivity and mobility
- Land use development potential
- Customer service
- Public support
- Risk avoidance
- Capacity accommodates future demand
- System integration

- Project funding toward capital improvements (minimize operations and maintenance increases/programs)
- Reduce SOV access share
- Greenhouse gas reduction
- Consistency with local agency and Sound Transit plans/policies
- Leverage previous investments (Sound Transit, other, matches)
- Flexibility for future actions
- Technology
- Highest and best use
- Design criteria

Chapter 4: Alternatives Analysis (Phase 5)

This chapter summarizes the analysis of access alternatives for the Sound Transit Access and Demand Study. The analysis uses future ridership and access mode estimates, based on the ST Access Tool (Appendix E), to assess the potential of multimodal access improvements to increase Sounder ridership. Ridership estimates are based on future population and employment growth around the station, as well as potential future infrastructure improvements (described in Chapter 5).

By station, current passenger counts by access mode are compared to three future scenarios, in 2030:

1. **2030 ST Access Tool Model Forecast** – This ridership estimate is based on the ST Access Tool Model, which uses a nation-wide station access database to forecast ridership based on station type, land use, access facilities and feeder service (e.g. park-and-ride, feeder transit, and street network). Land use projections for each station are based on Puget Sound Regional Council (PSRC) data (2006) and it is assumed there would be no change in station typology, feeder service, or street network. PSRC land use projections are based on the jurisdictions' adopted land use plans.
2. **ST 2030 Fare Model Forecast without Mode/Land Use Shift** – This ridership estimate is based on the ST Fare Model and assumes that the access mode share does not change (the majority of riders will continue to arrive by car and associated parking demand is met). This model also assumes that feeder transit service levels are constant with 2010 levels.
3. **2030 ST Fare Model Forecast with Mode/Land Use Shift** – This ridership estimate is based on the ST Fare Model and assumes that access modes will shift towards a more multi-modal mode share found at stations surrounded by more transit-friendly development. This model also assumes a greater number of non-park-and-ride access modes, with enough station-area residential density to generate forecasted walk and bike trips. Feeder transit service levels are constant. This represents the highest density scenario of future land use in the station areas.

These scenarios include the following assumed future characteristics for Sounder service:

- Peak period service only
- Mono-directional service (e.g. inbound to downtown Seattle in AM period)
- No charge for park-and-ride parking
- Integrated bus service for Feeder Transit

Transit-Oriented Development (TOD) has emerged around many commuter rail stations across the country. TOD includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation.

Such development is intended to reduce dependency on automobiles, as well as to improve mobility and access between residences, jobs, and services. Transit-oriented design around stations is often used to maximize the ridership potential of surrounding development. For all eight of the Sounder stations studied, the 2030 ST Fare Model Forecast with Mode/Land Use Shift scenario assumed a slightly higher density land use than identified in the jurisdiction's comprehensive plan with a range of 2- to 8-story structures. This scenario also assumed no substantial increase in the total amount of park-and-ride spaces at the stations, transit connections, and a good pedestrian and bicycle network within the station area.

The results of the analysis show that potential access improvements could produce increased future ridership on Sounder service beyond that already forecast for the system. Table 4-1 summarizes the results of the analysis, and shows that the improvements result in ridership increases ranging from as little as 1% (approximately 20 additional riders at Puyallup) to as high as 75% (approximately 80 additional riders at Mukilteo). Potential access improvements to facilities near the Lakewood Station are estimated to generate approximately 260 additional riders, which represents the highest projected ridership increase of all stations.

Table 4-1: Summary of Phase 5 Analysis Findings

Station	Modeled 2010 Ridership	2030 Baseline Ridership Estimates		Benefit of Improvements	
		ST Access Tool Model Forecast ¹	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Additional Riders	% Increase over Forecast
Mukilteo	110	110	200	80	42-75%
Kent	840	1,060	2,000	90	5-9%
Auburn	750	1,110	1,500	190	13-17%
Sumner	770	950	1,100	180	17-19%
Puyallup	830	1,260	2,000	20	1-2%
Tacoma Dome	720	1,000	1,930	160	8-16%
South Tacoma	--	670	700	190	27-28%
Lakewood	--	1,020	700	260	25-37%
TOTAL	4,020	7,180	10,130	1,170	11-16%

1. Ridership estimates based on population and employment growth from PSRC, using Access Tool model.

Overall, the potential access improvements described in this chapter result in a total daily ridership increase of approximately 1,170 in 2030 (an 11–16% increase) compared to the no-improvement baseline. This increase occurs with no substantial increase in the total amount of park-and-ride spaces at the study stations and would largely result from improved pedestrian or bicycle connections to each of the stations, the addition of residential or employment-centered development within non-motorized commuting distance of the station, an increase in drop-off/pick-up spaces, or a combination of the above.

The Sound Transit Parking Pricing Study (2009) found that parking pricing offers an opportunity to better manage parking supply, encourages riders to use alternative access modes, and cost-effectively manages the system by generating revenue that could offset parking-related costs or

contribute to improved transit access. However, implementing parking pricing also carries with it the cost of infrastructure, management and operating a system, potential decreases in ridership by parking customers who are unwilling to pay for parking, potential shift in transit modes or to alternate parking facilities, and potential challenges with jurisdictional issues such as parking spillover into surrounding neighborhoods.

Methods

This chapter presents the results of the analysis, including the estimated morning peak boardings for existing conditions (2010) and baseline future conditions (2030) for each of the study stations. The growth between 2010 ridership and the 2030 baseline represents the growth projected by the Sound Transit Access Tool and Sound Transit revenue models based on regional growth in both population and congestion, and does not account for additional access improvements. The analysis also provides an assessment of the incremental ridership increase associated with the improvements discussed in this chapter for each station.

Population and employment growth in the Sounder station areas is based on the PSRC regional model, which projects growth for its Forecast Analysis Zones (FAZs). Since more refined forecasts were not available, the analysis was performed by assuming a uniform distribution of population and employment growth across each of the zones within a ½-mile radius of the station. Where multiple FAZs are within a station area, the growth rates are averaged.

The primary analysis tool used is the Sound Transit Access Tool, which was developed by the URS Team and is described in detail in Appendix E. This tool is based on the spreadsheet tool *Transit Cooperative Research Program (TCRP) Report 153: Guidelines for Providing Access to Public Transportation Stations* (TCRP Report 153) developed for the Transportation Research Board of the National Academies. It uses inputs on adjacent land use (e.g., population density, employment) and station access facilities and services (e.g., parking capacity, feeder transit service availability) to estimate station boardings by access mode. In addition, the spreadsheet incorporated the connectivity analysis provided by the Sound Transit Connectivity Tool (Appendix F) to quantify the potential ridership benefits associated with connectivity improvements in the vicinity of the study stations.

The Sound Transit Access Tool does not account for potential changes in travel behavior associated with external pressures (e.g., oil price spikes) or demographic changes. Therefore, increases in the 2030 baseline ridership come entirely from: (1) an expansion of the station catchment area; and/or (2) increases in population and jobs within the ½-mile catchment area. The Sound Transit Access Tool estimates additional changes in ridership beyond the 2030 Baseline, based on the access improvements at each station described in this chapter.

The TCRP Report 153 and the Sound Transit Access Tool classify stations based on certain characteristics of the station area, including land use intensity, feeder transit connections, parking availability, and the quality of the pedestrian network. Under current conditions, the stations in this study can be classified as “Suburban Village Center,” which is based on a

subregional hub for transit, limited pedestrian/bicycle access, and surrounding medium-high housing density (about 20-25 dwelling units per acre). Unless the station area type or land use pattern changes due to anticipated growth (e.g., “Suburban Village Center” to “Suburban TOD”), the proportionate share of various access modes within the model remains similar as overall ridership grows.

Four stations (Kent, Auburn, Sumner, and Puyallup) change from “Suburban Village Center” to “Suburban TOD” between 2010 and 2030 to reflect anticipated growth. “Suburban TOD” stations have a medium-high housing density (about 20-30 dwelling units per acre), some local bus connections, and a good pedestrian/bike access network within the station area. Under the ST Fare Model Forecast with Mode/Land Use Shift model, the Tacoma Dome station would change from “Suburban Village Center” to “Urban Neighborhood with Parking.” “Urban Neighborhood with Parking” stations have medium housing density (about 10-20 dwelling units per acre), are within 5–10 miles of the central business district, operate as a subregional transit hub, and have a high quality pedestrian/bike access network. Mukilteo, South Tacoma and Lakewood remain “Suburban Village Centers.”

Bicycle Access

The Sound Transit Access Tool does not provide a method to quantitatively estimate the benefit of local bicycle network improvements on bicycle access. An additional refinement to the Sound Transit Access Tool was made to allow the tool to better assess the bicycle access potential improvement projects. To address bicycle improvements, first a reasonable maximum for bicycle access to transit at a given station was set as 10% of all riders. This value was determined based on a review of access characteristics at over 500 stations throughout the country as part of TCRP Report 153, which indicated there are only two stations where access by bicyclists represents more than 10% of total ridership.

Next, a qualitative review of the suggested bicycle improvements was conducted to estimate the extent to which these changes constitute a complete bicycle network with high-quality bicycle access to the station from all directions. Stations with high-quality bicycle access in all directions and high numbers of residents within a 2-mile distance received higher bicycle mode shares in the future. Note that the topography of each station may vary and could be more or less conducive to bicycle access. Estimated bicycle mode share at study stations after improvements ranged from 2% (Puyallup) to 6% (South Tacoma).

Examples of high-quality bicycle access include sharrows and bicycle boulevards. While a typical bike lane is a portion of the roadway that has been designated by striping, signage, and pavement markings for the use of bicycles; sharrows and bicycle boulevards differ and offer other advantages to a cyclist. Sharrows, or shared lane markings, are road markings used to indicate a shared lane environment for bicycles and automobiles. Sharrows reinforce the legitimacy of bicycle traffic on the street. Bicycle boulevards are streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority. Bicycle boulevards use signs, pavement markings, and speed and volume management measures to

discourage use by motor vehicles and create safe, convenient bicycle crossings of busy arterial streets.

Finally, the projected bicycle parking demand at each station and the current parking supply was reviewed to identify potential future bicycle parking deficiencies. Typically Sounder trains have space for up to four bicycles per car, for a total of 28 bicycles per northbound morning trip on a seven-car train and a total of 16 bicycles per southbound morning trip on a four-car train. In the future, Sound Transit plans to add one car to each Tacoma-Seattle northbound train, providing capacity for up to 32 bicycles.

Of the four bicycle storage spaces on each Sounder train, two have facilities to secure a bicycle, and two are for standing passengers with their bicycle (this space is also designated for passengers in wheelchairs, who have priority over bicyclists). Since standing on a train car with a bicycle is not desirable and those spaces may not always be available, the station bicycle parking demand analysis is based on the number of riders who would arrive at the Sounder station with a bicycle but would choose not to take their bicycle on board the train. For this analysis, the assumption is two bicycles per car, or 16 per northbound morning train and eight per southbound morning train in the future. Assuming 10 northbound morning trains, the on-board bicycle parking supply could accommodate up to 160 bicycles. To spread the demand for bringing bicycles on board, the capacity was divided evenly among the eight southern stations (including each of the study stations plus Tukwila). The same analysis for the Everett-Seattle Line yielded 84 bicycles divided among three stations. Therefore, to provide enough bicycle parking at each station, 20 of the Tacoma-Seattle Line morning bicycle boardings and 28 of the Everett-Seattle Line boardings could be accommodated aboard Sounder trains; the remainder would require parking at the station. Table 4-2 below illustrates the bicycle parking analysis.

Table 4-2: Summary of Bicycle Parking Analysis¹

Station	Current Bike Mode Share	Potential Future Bike Mode Share	Future Bicycle Boardings	Existing Bicycle Parking Spaces	On-Board Vehicle Parking Supply	Bicycle Parking Deficiency
Mukilteo	0.6%	3%	8	6	28	16*
Kent	0.8%	3%	62	52	20	0
Auburn	1.1%	5%	66	72	20	0
Sumner	3.0%	4%	57	24	20	13
Puyallup	1.0%	2%	40	45	20	0
Tacoma Dome	1.0%	4%	68	48	20	0
South Tacoma	N/A	6%	52	24	20	8
Lakewood	N/A	2%	25	18	20	0

1: Analysis is based on TCRP Report 153 station-type data.

* Deficiency based on minimum desirable bike parking spaces, rather than projected demand.

A review of national station access data shows that the median bicycle parking supply at rail stations is 16 spaces; this is used as the minimum threshold for Table 4-2. Based on this analysis, additional bicycle parking is needed at three of the stations: Mukilteo, Sumner and South Tacoma. At Mukilteo, the projected deficiency is based not on projected demand but on the minimum number of desirable bicycle parking spaces at any given station. Sound Transit

policy does not specify a minimum, but the Sound Transit Bicycle Administrative Policy states that Sound Transit should promote bicycle access to transit and also encourage cyclists to store/park their bikes at stations. Providing some bike parking at each station is consistent with this policy.

In addition to simply providing sufficient bicycle parking capacity, passengers considering accessing Sounder by bicycle are also concerned with the type of bicycle parking offered at the station. Many cyclists will not leave their bicycles for extended periods in an uncovered or unsecure location. There are a variety of options for bike storage at Sounder stations that could provide more secure bike storage than bike racks (Table 4-3). Providing additional secure bicycle parking may help to attract bicycle access riders to Sounder and reduce the number of on-board bicycles.

Table 4-3: Summary of Secure Bicycle Parking Options

	Bike Stations	Bike Lockers: Subscription	Bike Lockers: Shared System	Self-Service Bike Cage
Description	Provides valet attended parking. Other services (lockers, changing rooms, showers, bicycle repair, etc.) are optional.	Metal or plastic containers for storing bicycles. Self-serve.	Metal or plastic containers for storing bicycles. Self-serve.	Bicycle racks inside a locked, secure room. Free-standing cages, or fenced-in room.
Method of Access	Electronic key access, must purchase membership.	Subscribers assigned a specific locker.	Electronic key accesses network of lockers on first-come, first-served basis.	Electronic payment and/or access for subscribers.
Typical Fee Payment Method	Monthly/annual subscription.	Deposit and monthly/annual fee.	Fees charged electronically by use (several cents per hour).	On demand or annual subscription.
Benefits	High level of service and security.	Users guaranteed a spot. More secure than racks.	Higher utilization than subscription lockers. Users pay only for what they use. More secure than racks.	Lower operating costs than attended parking. More secure than open racks. High potential utilization.
Cons	High capital and operating costs. Requires a vendor to run and manage the Bike Station as a separate business.	Potential for patrons to store items other than bicycles. Waitlists for subscriptions common. Low daily utilization, and when not in use, it's not available for others to use.	Potential for patrons to store items other than bicycles. Electronic payment system increases operating costs. Being able to use ORCA for payment is several years in the future.	Lower security and service to patrons than bike stations. Potential for more bicyclists to subscribe than there are rack spaces.

Passenger Drop-Off/Pick-Up Access

In addition to evaluating the ridership impacts of various access improvements, the potential need for additional drop-off (and pick-up) capacity was evaluated. Drop-offs at Sounder stations occur during morning periods and pick-ups occur during the evening. Of drop-off and pick-up trips, pick-up trips are the primary concern. Typically drop-offs are quick, with vehicles

leaving after passengers exit the vehicle. With pick-up trips vehicles usually arrive before the train, requiring one parking space for each pick-up. Typically, where demand for drop-off/pick-up exceeds capacity, transit riders and their drivers find alternative parking arrangements (e.g., double-parking, parking in access lanes, parking in station parking lot aisles, or parking on surrounding neighborhood streets) rather than not making the trip at all. As a result, increased drop-off/pick-up capacity is unlikely to significantly impact ridership. However, it is still desirable to provide sufficient capacity for drop-off patrons to avoid the negative impacts that illegally parked drivers can have on station parking lots, neighborhood streets, traffic, and transit operations in the vicinity of stations.

To determine the potential demand for additional drop-off capacity, the team reviewed typical drop-off access by station type based on a review of national data collected for the TCRP Report 153. The typical percentage of drop-off demand at stations ranged from 11% at Suburban Neighborhood stations to 36% at Intermodal Transit Center stations. The amount of pick-up parking necessary to support this typical demand was then estimated and compared to the stations' current capacity to estimate the potential demand for additional pick-up parking (Table 4-4).

Table 4-4: Summary of Passenger Pick-Up Analysis¹

Station	Future Passenger Pick-Up Boardings	Space Demand	Existing Supply	Pick-Up Space Deficiency
Mukilteo	11	2	8	0
Kent	329	60	39	21
Auburn	259	47	37	10
Sumner	186	34	20	14
Puyallup	322	58	38	20
Tacoma Dome	88	16	56	0
South Tacoma	91	17	22	0
Lakewood	140	25	14	11

1: Analysis is based on TCRP Report 153 station-type data.

Kent, Auburn, Sumner, Puyallup, and the future Lakewood Stations all have pick-up demand forecasts that exceed the available supply of short-term parking. However, additional unused space at each of those stations could be converted to short-term parking (without decreasing the amount of long-term parking) to meet demand.

The following section provides a summary of the estimated future access mode-share by station based on the 2030 ST Access Tool Model Forecast. Changes to the future planned density scenario (2030 ST Access Tool Model Forecast) that could result if potential improvement projects are implemented are shown for each station.

Station-by-Station Access Summary

Mukilteo Station

The population and employment within ½ mile of the station is anticipated to grow by nearly 30% by 2030. Access improvements analyzed at the Mukilteo Station primarily focus on better integration of commuter rail and ferry services, including a pedestrian bridge, enhanced wayfinding, and schedule coordination with feeder transit. To evaluate the impact of these improvements, a 20% increase in feeder transit service was modeled, which resulted in a projected two additional riders during the morning peak period.

Riders not accessing the station by ferry currently must walk to the SR 525 bridge, ¼ mile west of the station, to cross the BNSF Railway tracks to the station. A proposed bridge connection would help these passengers access the station from the adjacent neighborhood to the south. This new connection could result in as many as 80 additional riders accessing the station by foot and 10 by bicycle (Table 4-5). Additional improvements that could be implemented in the vicinity of the station are listed on pages 4-9 and 4-10.

Table 4-5: Summary of Mukilteo Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ^{1,2}	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ³
Auto (Park-and-Ride)	70	50	65	-<10
Auto (Drop-off/Pick-up)	<10	<10	25	--
Feeder Transit	30	50	30	+<10
Bicycle	<10	<10	<10	+<10
Pedestrian	<10	<10	80	+80
TOTAL	110	110	200	+80

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. Current auto parking supply is limited to 63 vehicles. If no additional parking is provided, some forecast auto access passengers may switch to other modes, park in the surrounding neighborhood, or avoid accessing Sounder from this station altogether.
3. This column describes the projected additional riders or reduction in riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-9 and are described in Appendix H.

The graphs shown below are based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-2 and 4-3 use the ST 2030 Fare Model projection applied to a “suburban-village” and “TOD” station type, respectively. The TOD type has a higher density than the existing (or future) Mukilteo Station area, given current land use planning.

Figure 4-1: 2030 ST Access Tool Model Forecast

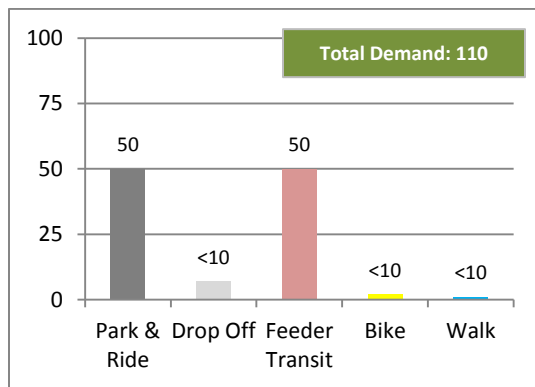


Figure 4-2: ST 2030 Fare Model Forecast without Mode/Land Use Shift

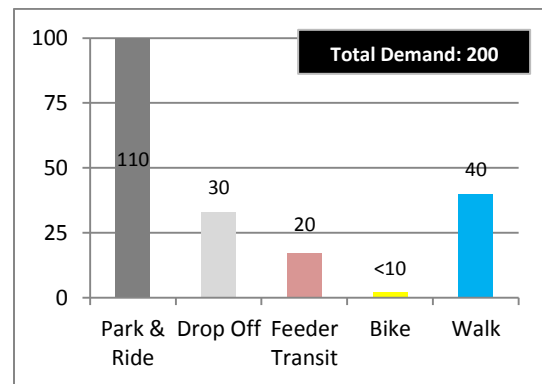
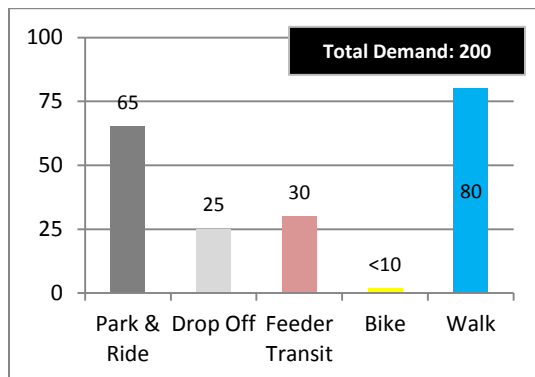


Figure 4-3: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Mukilteo.

Trails and Bike Lanes

- **Shoreline Trail:** Shoreline Walk with signage program that may include both public and private tidelands. Access will be subject to property owner permission. May include BNSF Railway overpass/underpass. Approximately eight miles long with an estimated cost of \$27,000 per mile. Each BNSF Railway crossing would cost about \$2.6 million (Bicycle, Trails & Pedestrian Plan 2009).

- Waterfront Promenade: Multipurpose trail from Lighthouse Park to Tank Farm. 0.4 mile long; \$4.75 million (Bicycle, Trails & Pedestrian Plan 2009).
- Japanese Gulch Trail: Neighborhood trail/sidewalk improvements. 2.5 miles long; \$2.4 million (Bicycle, Trails & Pedestrian Plan 2009).
- Waterfront Pedestrian Bridge: Bridge from 2nd Street to the waterfront. Cost is to be determined (Bicycle, Trails & Pedestrian Plan 2009).

Infrastructure

- Parking and Pedestrian Bridge: Construct parking (80-100 stalls) and pedestrian access bridge connecting Mukilteo with the Mukilteo Multi-modal Terminal between Park Avenue and the Mt. Baker crossing. \$1 million appropriated, to be completed in 2020. This project has been amended to reduce costs (PSRC Transportation 2040 Appendix M, T2040 ID #4010).
- Pedestrian Wayfinding: Construct wayfinding signage between the WSF terminal, downtown, key waterfront locations, transit center and Mukilteo Station (WSDOT Ferries Division Final Long-Range Plan, Appendix J Proposed Transit Enhancements by Terminal).
- Bike lockers: Install four bike lockers and 12 racks (Sound Transit).

Parking

Policies that could increase access and manage the demand for parking at the Mukilteo Station could be implemented, such as parking pricing. No additional space for drop-off/pick-up is assumed to be needed to meet future demand.

Kent Station

The population within ½ mile of the station is anticipated to grow by nearly 10% by 2030, while employment is projected to increase by about 70%. Sound Transit can support the City of Kent's investments in their non-motorized transportation network and capitalize on improved access by supporting implementation and increasing bicycle parking at Kent Station. Improving pedestrian and bicycle connections to the station from the surrounding area, combined with improved King County Metro feeder bus service, could result in as many as 90 additional riders; the majority of which are projected to be pedestrian and bicycle access trips (Table 4-6).

The parking supply at Kent Station exceeds the current and forecast demand. However, if parking pricing at Sumner, Puyallup, and/or Auburn Stations is implemented, this may result in additional parking demand at Kent Station. Note that the modeled ridership for Kent does not account for the potential of diverted riders caused by parking pricing. Depending on the extent to which riders divert to Kent, Sound Transit may want to consider pricing at this station to offset diverted park-and-ride trips. Alternatively, as downtown Kent continues to transform into a walkable, transit-oriented center, there may be opportunities to convert existing parking spaces into other uses. For example, surface lots could be declared surplus and subsequently made available for TOD.

Table 4-6: Summary of Kent Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ¹	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ²
Auto (Park-and-Ride)	640	640	810	-<10
Auto (Drop-off/Pick-up)	100	120	330	+<10
Feeder Transit	50	90	110	+10
Bicycle	<10	10	30	+30
Pedestrian	50	200	720	+50
TOTAL	840	1,060	2,000	+90

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. This column describes the projected additional riders or reduction in riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-14 and in Appendix H.

The data shown below is based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-5 and 4-6 use the ST 2030 Fare Model projection applied to a “suburban-village” and “TOD” station type, respectively. As the residential density for the station-area is not specified by the City of Kent, it is assumed that the TOD type has a slightly higher density than the existing (or future) Kent Station area.

Figure 4-4: 2030 ST Access Tool Model Forecast

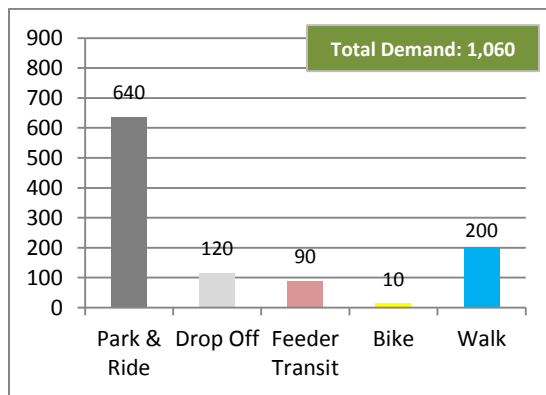


Figure 4-5: ST 2030 Fare Model Forecast without Mode/Land Use Shift

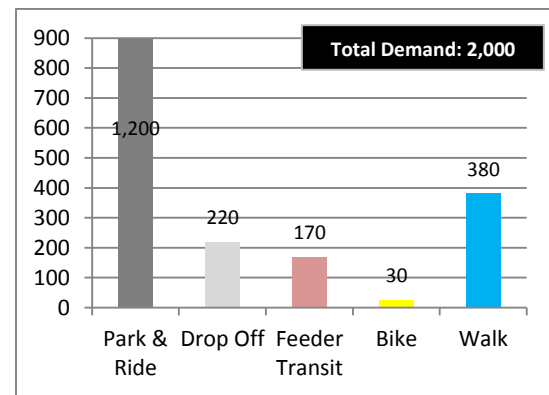
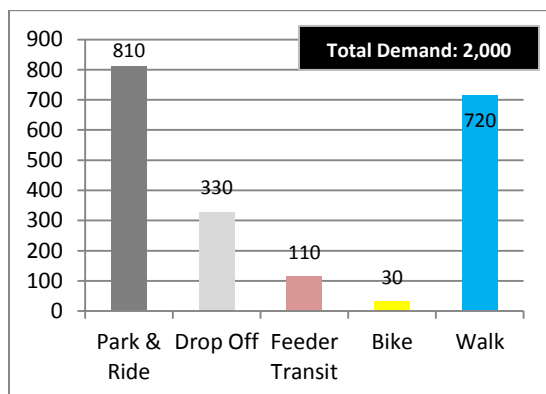


Figure 4-6: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs is drawn from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Kent.

Roads and Sidewalks

- **Mill Creek Pedestrian Bridge:** Enhance or replace the existing pedestrian bridge over Mill Creek (from Kennebeck Ave N to E Temperance St) to increase connectivity between downtown and the East Hill neighborhood (2011-2016 TIP).
- **Reiten Rd Sidewalks:** Complete sidewalks along Reiten Rd from E Titus St to E Guiberson St, on the southwest side of the road only.

Trails and Bike Lanes

- Gowe St/Titus St Bike Lane/Sharrow: Add bike lane or sharrows, including necessary signage on Gowe St and Titus St from E Meeker St to E Smith St.
- 2nd Ave Bike Lane/Sharrow: Add bike lane or sharrows, including necessary signage on 2nd Ave from Gowe St to James St.
- Shared facility project along James St: Participate in the “bike-by-bus” program with the City of Kent and King County Metro. This would include adding signage or other information to bike riders along James Street to S 240th St.
- Reiten Rd Sharrows: Add sharrows, including necessary signage on Reiten Rd from E Titus St to E Maple St.

Infrastructure

- Real-time Parking Availability Signage: Install real-time parking availability information signage on major access route and parking guidance at garage.
- Bike Lockers: Install eight new bike lockers.

Parking

Policies that could manage the demand for parking at the Kent Station could be implemented, such as:

- Parking pricing (if also implemented at Auburn, Puyallup, and/or Sumner Stations).
- Expanded drop-off/pick-up capacity at the station.

Auburn Station

Downtown Auburn is expected to grow considerably by 2030, with a nearly 50% increase in employment and 30% increase in population projected within ½-mile of the station. Planned improvements in the vicinity of Auburn Station are fairly comprehensive and could significantly increase ridership at the station. They include supporting the City's Downtown Plan and improving bicycle and pedestrian accommodation around the station.

By improving pedestrian and bicycle connections, as many as 190 additional riders could result. Model results indicated that there could be a decrease of up to 20 park-and-ride access trips (Table 4-7). Some of those passengers could divert to drop-off/pick-up and/or feeder transit, while others may seek alternate travel options. Up to 140 new pedestrian access trips and 40 new bicycle access trips could result from access improvements to Auburn Station. The ridership increase at this station is the largest forecast for any existing Sound Transit station and is second only to Lakewood among the study stations. At the station itself, Sound Transit could implement parking demand management measures such as parking pricing.

Table 4-7: Summary of Auburn Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ¹	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ²
Auto (Park-and-Ride)	490	520	500	-20
Auto (Drop-off/Pick-up)	100	140	190	+10
Feeder Transit	130	80	210	+<10
Bicycle	<10	20	10	+40
Pedestrian	20	340	590	+140
TOTAL	750	1,100	1,500	+190

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. This column describes the projected additional riders or reduction in riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-15 and in Appendix H.

The graphs shown below are based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-8 and 4-9 use the ST 2030 Fare Model projection applied to a “suburban-village” and “TOD” station type, respectively. The TOD type has a higher density than the existing (or future) Auburn Station area, given current land use planning.

Figure 4-7: 2030 ST Access Tool Model Forecast

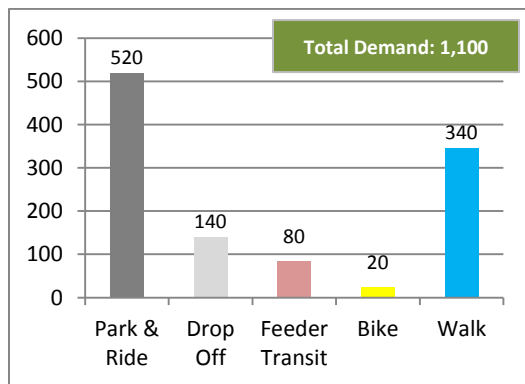


Figure 4-8: ST 2030 Fare Model Forecast without Mode/Land Use Shift

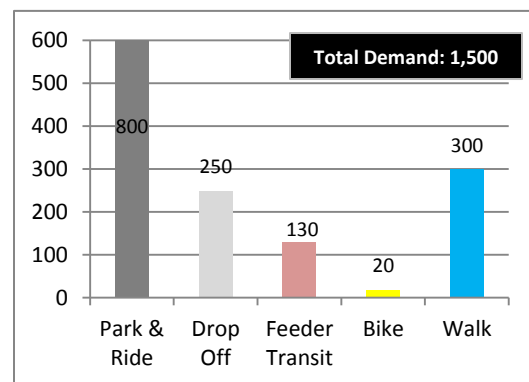
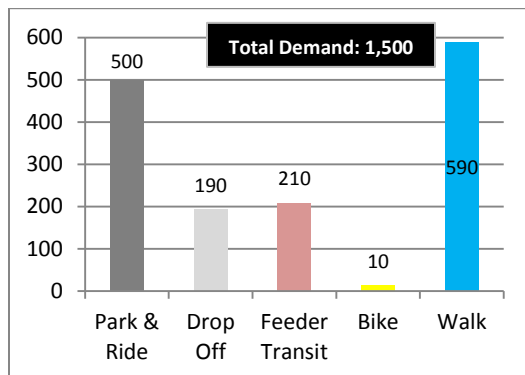


Figure 4-9: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Auburn:

Roads and Sidewalks

- A St NE pedestrian improvements – Complete pedestrian connection between downtown and 8th St NE business district. Improve pedestrian crossing at 3rd St NE and construct sidewalks/access ramps along A St NE (2011-2016 TIP).

Trails and Bike Lanes

- A St NE Bike Wayfinding and Bike Boulevard: Add wayfinding to non-motorized trail connection on A St NE between 10th St NE and 7th St NE. Construct sidewalk between 7th St NE and 3rd St NE St NE and calm traffic (2006 Future Trail and Bike Network).
- A St SW Sharrows: Add sharrows, including necessary signage along A St SW from Main St. to 2nd St SW (2006 Future Trail and Bike Network).
- 2nd St SW Sharrows: Add sharrows and signage on 2nd St SW from A St SW to F St SE.
- W Main St Bike Lanes: Add bike lanes and signage on W Main St west of the Interurban Trail crossing (2006 Future Trail and Bike Network).
- R St NE Bike Lanes: Add bike lanes and signage on R St NE from E Main St to 8th St NE (2006 Future Trail and Bike Network).
- C St SW Trail: Construct a trail along the west side of C St SW from the SR-18 & C St SW interchange to 15th St SW (2006 Future Trail and Bike Network).

Infrastructure

- Parking Garage: Construct a 300-stall parking garage on the west side of the station.
- Bike lockers: Install 20 new bike lockers and six new racks.
- Real-time Parking Availability Signage: Install real-time parking availability information signage on major access route and parking guidance at garage.

Parking

Policies that could manage the demand for parking at the Auburn Station could be implemented, such as:

- Parking pricing (if also implemented at Kent, Puyallup, and/or Sumner Stations).
- Expanded drop-off/pick-up capacity at the station.

Sumner Station

Population and employment growth in downtown Sumner are forecast to drive significant ridership growth at Sumner Station. The population within ½ mile of the station is anticipated to grow by 50% by 2030, while employment downtown is projected to increase by nearly 40%. Sumner is investing in its non-motorized transportation network, including new bicycle and pedestrian facilities.

At the station itself, Sound Transit could implement parking demand management measures such as parking pricing and access improvements such as increasing drop-off/pick-up capacity (Table 4-8). These improvements, along with increased and better coordinated feeder transit service, could result in additional new riders from all access modes except park-and-ride. The net impact of these changes could result in up to 180 additional riders, with the majority arriving by bicycle or foot.

Table 4-8: Summary of Sumner Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ¹	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ²
Auto (Park-and-Ride)	550	440	370	-<10
Auto (Drop-off/Pick-up)	110	150	140	+<10
Feeder Transit	60	30	150	+<10
Bicycle	20	20	10	+40
Pedestrian	30	310	430	+140
TOTAL	770	950	1,100	+180

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. This column describes the projected additional riders or reduction in riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-18 and in Appendix H.

The data shown below is based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-11 and 4-12 use the ST 2030 Fare Model projection applied to a “suburban-village” and “TOD” station type, respectively. The TOD type has a higher density than the existing (or future) Sumner Station area, given current land use planning (the majority of the land around the station is zoned for 7-15 dwelling units per acre).

Figure 4-10: 2030 ST Access Tool Model Forecast

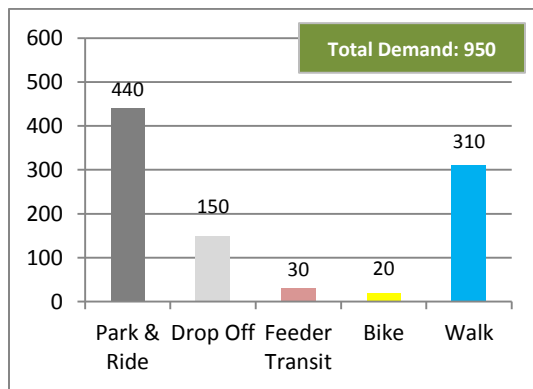


Figure 4-11: ST 2030 Fare Model Forecast without Mode/Land Use Shift

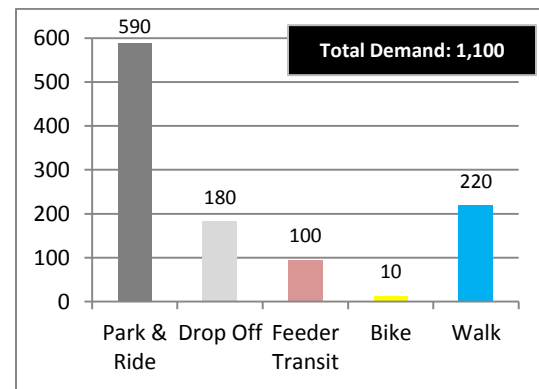
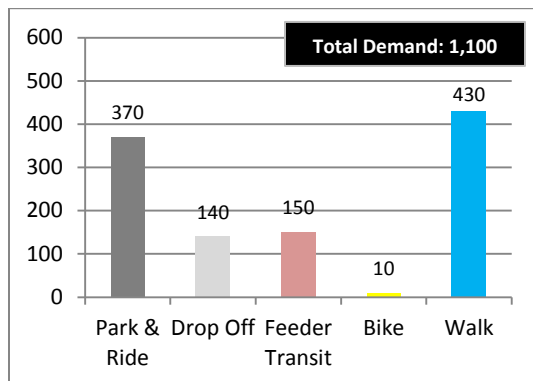


Figure 4-13: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Sumner.

Roads and Sidewalks

- Linden Drive/SR-410 Crossing Improvements: Construct sidewalks north and south of the bridge structure; widen sidewalk along SW side of the bridge structure.
- SR-410 Non-Motorized Bridge: Construct a new bridge for non-motorized users over SR-410, connecting Sumner Ave and 143rd Ave E.

Trails and Bike Lanes

- Puyallup River Trail Extension: Extend existing trail along north side of the Puyallup River from 72nd St E to Traffic St (2008 Trail Master Plan).
- Riverwalk Trail Access Point: Connect 134th Ave E with the Riverwalk Trail on the south side of Puyallup River with a paved connection and remove barriers.
- White River Trail Extension: Extend/connect fragmented existing trail running along the east side of the White River from State St north to Stewart Rd (2009-2014 TIP).
- Academy St Bike Boulevard: Construct a bicycle boulevard from Sumner Station to Valley Ave, including signage, traffic calming and intersection improvements at Wood Ave and Valley Ave E.

Infrastructure

- Station Pedestrian Bridge: Construct a pedestrian bridge over railroad tracks roughly in line with Elizabeth St connecting the east and west side of station.
- Bike lockers: Install 20 new bike lockers and nine new racks.
- Parking Garage: Construct a small (150-stall) or large (450-stall) parking garage.

Parking

Policies that could increase access and manage the demand for parking at the Sumner Station could be implemented, such as:

- Parking pricing (if also implemented at Kent, Auburn, and/or Puyallup Stations).
- Expanded drop-off/pick-up capacity at the station.

Puyallup Station

The population within ½ mile of the station is anticipated to grow by nearly 30% by 2030, while employment is projected to increase by about 35%. A new pedestrian bridge over the rail tracks, along with improved feeder bus service and parking demand management measures, would support the projected population and employment growth within ½-mile of Puyallup Station. Planned improvements could result in a 50% daily ridership increase. Currently most passengers access the station as park-and-ride users, but that could trend toward a more balanced access mode share following planned growth.

Improving pedestrian and bicycle connections to the Puyallup Station from the surrounding area could add up to 30 additional riders in the morning (Table 4-9). Implementing parking demand management measures, such as parking pricing at the station, could slightly reduce park-and-ride demand, though many of those passengers could switch to other access modes.

Table 4-9: Summary of Puyallup Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ¹	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ²
Auto (Park-and-Ride)	630	580	670	-20
Auto (Drop-off/Pick-up)	100	160	250	+10
Feeder Transit	60	100	280	+20
Bicycle	<10	30	20	+<10
Pedestrian	30	390	780	--
TOTAL	830	1,260	2,000	+30

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. This column describes the projected additional riders or reduction in riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-21 and in Appendix H.

The graphs shown below are based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-14 and 4-15 use the ST 2030 Fare Model projection applied to a “suburban-village” and “TOD” station type, respectively. The TOD type has a higher density than the existing (or future) Puyallup Station area, given current land use planning (the majority of the land around the station is zoned for 18 dwelling units per acre).

Figure 4-13: 2030 ST Access Tool Model Forecast

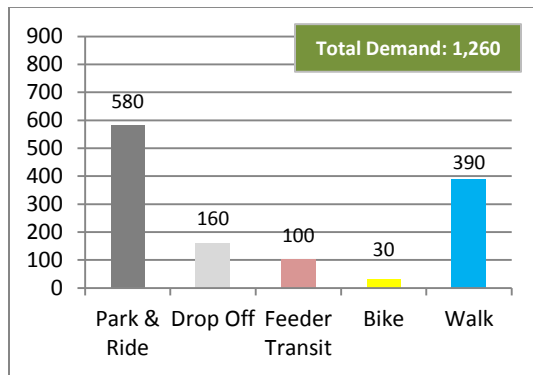


Figure 4-14: ST 2030 Fare Model Forecast without Mode/Land Use Shift

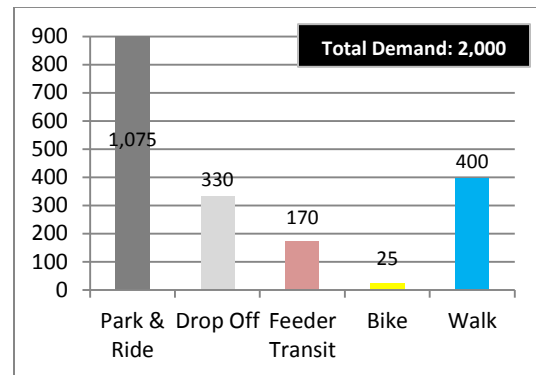
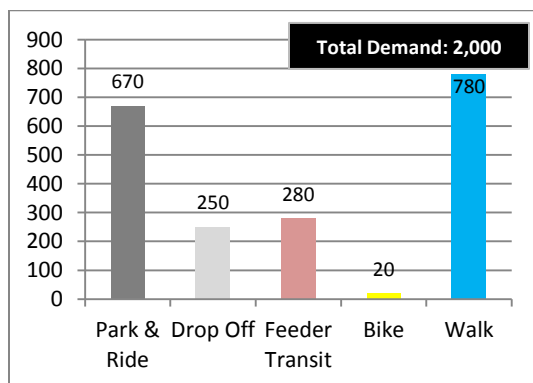


Figure 4-15: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Puyallup.

Roads and Sidewalks

- **Station Area Crosswalk Improvements:** Improve crosswalks at several locations in the vicinity of the station to meet ADA standards, including at 2nd St SW, 3rd St SW, W Stewart Ave, and 5th St SW (Puyallup Public Open House comment).
- **Railroad Crossing Improvements:** Improve railroad crossings at S Meridian and 5th St SW to meet ADA standards.

Trails and Bike Lanes

- 7th Ave Bike Lanes and Sharrow: Add bike lanes and sharrows, including signage, on 7th Ave from 18th St SW to 21st St SE.
- 21st Ave NW to 4th St NW Bike Boulevard: Add a bicycle boulevard, including signage, starting at 21st Ave NW heading east on 10th Ave NW, then south on 13th St NW, then east on 7th Ave NW, ending at 4th St NW.
- 4th St NW Bike Lane: Add bike lane, including signage, on 4th St NW from the Puyallup River trail to W Stewart Ave.
- 2nd St SW Sharrow/Bicycle Boulevard: Add a bicycle boulevard, including signage, on 2nd St SW starting at E Main and ending at 9th Ave SW.
- 7th St SW Bicycle Boulevard: Add a bicycle boulevard, including signage, on 7th St SW from Fairview Dr to W Main Ave.
- W Main Ave Sharrows and Bike Lanes: Add sharrows and bike lanes, including signage, from 7th St NW to 5th St SE.

Feeder Transit

- Turning Radius Improvements: Improve the turn movements to accommodate transit turns at the intersection of 5th St and W Pioneer Ave for more direct access to the station (Pierce Transit 2011).

Infrastructure

- Station Pedestrian Bridge: Construct a pedestrian bridge over the tracks half way between 2nd St NW on the north and 3rd St SW on the south (Comprehensive Plan Downtown Revitalization Neighborhood Plan, Puyallup Public Open House comment; Pierce Transit 2011).
- Parking Garage: construct a small (255-stall), medium (400-stall) or large (490-stall) parking garage.
- Install real-time arrival signs (Pierce Transit 2011).

Parking

Policies that could increase access and manage the demand for parking at the Puyallup Station could be implemented, such as:

- Parking pricing (if also implemented at Kent, Auburn, and/or Sumner Stations).
- Expanded drop-off/pick-up capacity at the station.

Tacoma Dome Station

Population and employment within ½ mile of the Tacoma Dome Station area are expected to grow by more than 50% by 2030. As a result, Sound Transit ridership at the Tacoma Dome Station is forecast to increase considerably. The parking garage has capacity in excess of future demand, as some demand will shift to South Tacoma and Lakewood Stations when they become operational in 2012.

Improvements to the pedestrian and bicycle networks in the vicinity of the station would help increase non-motorized station access. Improving coordination between Sounder trains and feeder transit buses encourages additional feeder transit access. In all, by improving pedestrian and bicycle connections to the station from the surrounding area ridership could increase by an additional 160 passengers above the baseline (Table 4-10).

Table 4-10: Summary of Tacoma Dome Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ¹	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ²
Auto (Park-and-Ride)	600	810	600	--
Auto (Drop-off/Pick-up)	60	60	160	--
Feeder Transit	40	120	240	+<10
Bicycle	<10	<10	50	+50
Pedestrian	10	<10	560	+100
TOTAL	720	1,000	1,900	+160

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. This column describes the projected additional riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-24 and in Appendix H.

The graphs shown below are based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-17 and 4-18 use the ST 2030 Fare Model projection applied to a “suburban-village” and “Urban Neighborhood with Parking” station type, respectively. The Urban Neighborhood type has a higher density than the existing (or future) Tacoma Dome Station area that reflects current land use planning underway by the City of Tacoma.

Figure 4-16: 2030 ST Access Tool Model Forecast

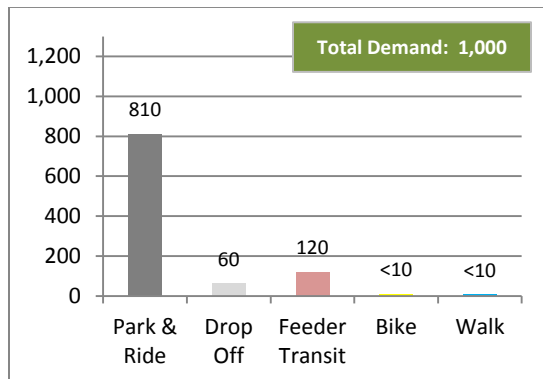


Figure 4-17: ST 2030 Fare Model Forecast without Mode/Land Use Shift

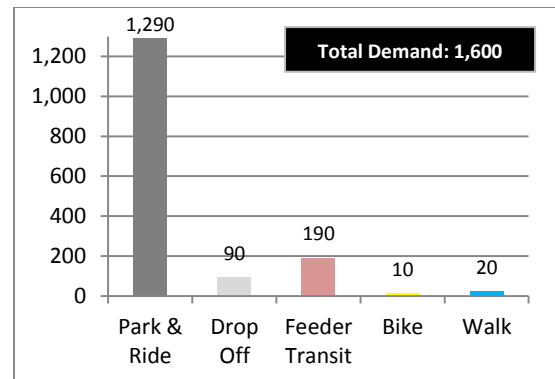
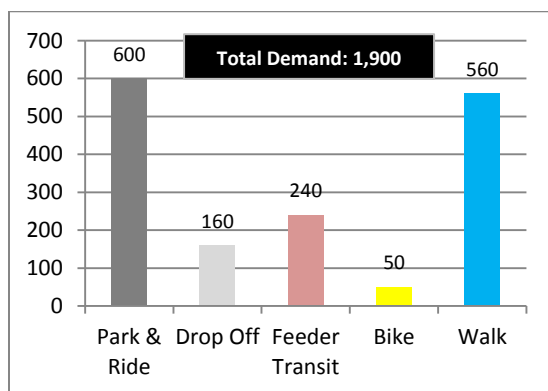


Figure 4-18: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Tacoma for the Tacoma Dome Station.

Roads and Sidewalks

- Puyallup Ave Crossing Improvement: Construct crosswalks and add lighting for Puyallup Ave at E C St or E 22nd St.
- Station-Area Pedestrian Lighting: Pedestrian safe lighting for Puyallup Ave, East D St and Puyallup Ave at Tacoma Dome Station (Tacoma Public Open House comment).

Trails and Bike Lanes

- Pipeline Trail: Construct a shared-use path along Pipeline Rd from the E 40th St to Waller Rd (2010 Mobility Master Plan).
- East K St/E Wright Ave Bicycle Boulevard: Add a bicycle boulevard, including signage, along E K St and E Wright Ave from McKinley Park to the Pipeline Trail.
- Puyallup Ave Bike Lanes: Add bike lanes and signage along Puyallup Ave from S C St to Milwaukee Way (2010 Mobility Master Plan).
- E McKinley Way Bike Lanes: Add bike lanes and signage along E McKinley Way from E D St to E 56th St.
- Prairie Line Trail – Phase 2 (Water Ditch Trail Extension): Construct a non-motorized vehicle trail along the Prairie Line Rail right of way from S 21st St to S Pine St (Transportation 2040).
- East L St Climbing Bike Lane/Sharrow Combination and Bike Boulevard: Add a climbing lane and sharrow combination from Puyallup Ave to E 29th St bicycle boulevard, and add signage along E Upper Park Rd from E 29th St to E McKinley Ave.
- Portland Ave Bike Lanes: Add bike lanes and signage along Portland Ave from Puyallup Ave to E to E 56th St.

Feeder Transit

- E G St Boarding Area and Layover Zone Improvements: Expand the transit bus bay on G Street adjacent to the Tacoma Dome Station facility to increase passenger boarding areas and bus layover zones (Pierce Transit 2011).

Infrastructure

- Station Pedestrian Bridge: Construct a pedestrian bridge over the tracks in line with East E St from Freighthouse Square to E 26th St.
- Bike Lockers: Install 20 new bike lockers.
- Contribute 400 stalls (of a proposed 3,000-stall garage).

Parking

Policies that could increase access and manage the demand for parking at the Tacoma Dome Station could be implemented, such as:

- Parking pricing (if also implemented at South Tacoma and Lakewood Stations).
- Install real-time parking availability signage (Pierce Transit 2011).

South Tacoma Station

The Sound Transit Access Tool model estimated station access for the future South Tacoma Station, assuming it were open in 2010. Model results indicated that slightly more than 500 riders would use the service in 2010 based on station-area characteristics, which is about 200 riders less than the Sound Transit forecast passenger volumes for 2030. The Sound Transit Access Tool model estimate for 2030 was very close to the Sound Transit model estimate. Without existing access data to calibrate the model, these estimates were used to perform the access improvements analysis.

Significant station-area improvements within the station area that are included in Tacoma's Mobility Master Plan (which includes shared use paths, bicycle lanes, and bike boulevards) would encourage passengers to access the system at South Tacoma Station. Additionally, Sound Transit could encourage feeder bus schedule coordination to further boost ridership. In all, station-area pedestrian and bicycle access improvements could result in as many as 190 additional riders in 2030 (Table 4-11).

Table 4-11: Summary of South Tacoma Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ^{1,2}	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ²
Auto (Park-and-Ride)		290	230	--
Auto (Drop-off/Pick-up)		90	90	--
Feeder Transit		70	100	+<10
Bicycle		20	<10	+30
Pedestrian		200	270	+160
TOTAL	500⁴	670	700	+190

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. There are 220 existing parking stalls in the lot at the South Tacoma Station. If no additional parking is provided, some forecast auto access passengers could switch to other modes, park in the neighborhood, or avoid accessing Sounder from this station altogether.
3. This column describes the projected additional riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-27 and in Appendix H.
4. A breakdown by access mode was not modeled as Sounder service had not begun at the South Tacoma Station at the time of this study. The total Modeled 2010 Ridership is based on the November 2010 surveys and is modeled based on station-area population and employment.

The graphs shown below are based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-20 and 4-21 use the ST 2030 Fare Model projection applied to a “suburban-village” and “TOD” station type, respectively. The TOD type has a higher density than the existing (or future) South Tacoma Station area, given current land use planning (the majority of the land around the station is zoned for 9-15 dwelling units per acre).

Figure 4-19: 2030 ST Access Tool Model Forecast

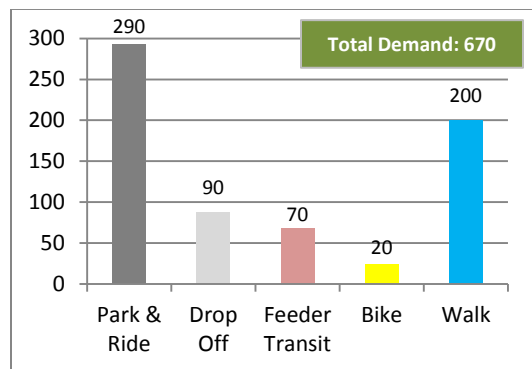


Figure 4-20: ST 2030 Fare Model Forecast without Mode/Land Use Shift

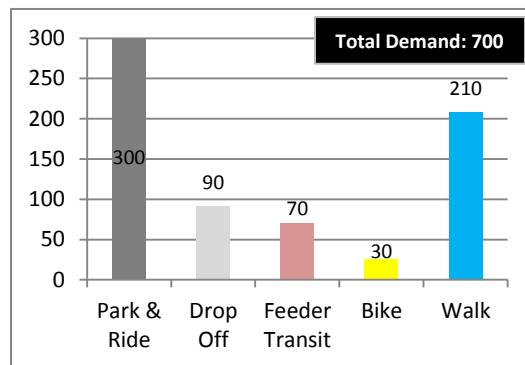
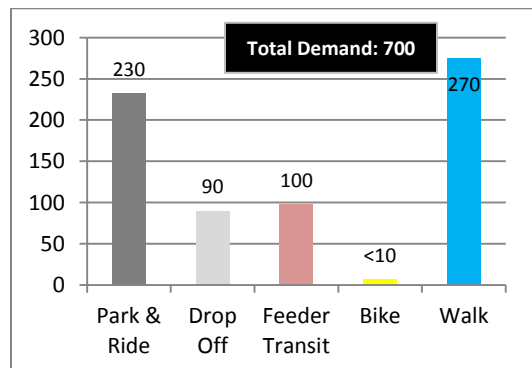


Figure 4-21: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Tacoma for the South Tacoma Station.

Roads and Sidewalks

- **Station Area Access Improvements:** Construct and install street lighting, sidewalks and curb ramps between the South Tacoma Station and the business district near S 56th St (2010-2015 CTP).

- S Tacoma Way Crossing Improvements: Improve signalized crossings at S 56th St to ADA standards, improve S 58th St to ADA standards, and improve S 60th crossing to ADA standards (Tacoma Public Open House comment).
- S 56th St Crossing Improvements: Improve the crosswalks at the intersection of S 56th St and S Washington St to meet ADA standards.
- Sidewalk Improvements Near Station: Construct a sidewalk on north side of S 60th St between the railroad tracks and tie into the sidewalk along S Tacoma Way; construct sidewalks on both the north and south sides of S 58th St from S Washington St that tie into the sidewalk along to Tacoma Way; and improve the sidewalk on the south side of S 56th St between S Adams St and S Tyler St to meet ADA standards.
- S 56th St and I-5 Interchange Crossings: Improve the freeway ramp crosswalks to meet ADA standards; increase visibility of crosswalk locations; and improve connection between the sidewalks on the north side of S 56th St and the S Railroad St bicycle boulevard (Comprehensive Plan).

Trails and Bike Lanes

- S 66th St Bike Boulevard: Add a bicycle boulevard and signage along S 66th St from S Tacoma Way to S Wapato St (2010 Mobility Master Plan).
- Oaks St Bike Lane: Add bike lanes and signage along Oaks St from S 66th St to S 47th St (2010 Mobility Master Plan).
- S 54th St/S Railroad St Bicycle Boulevard: Add a bicycle boulevard and signage from S Washington St to Tacoma Mall Blvd (2010 Mobility Master Plan, Tacoma Open House public comment).
- Water Ditch Trail TAC-40: Construct a non-motorized trail along the Water Flume Line from A Street to S 56th Street to S 60th St.
- S 58th St Non-Motorized Connection: Construct a high quality walking and biking connection (part or cycle track) along S 58th St between S Washington St and S Fife St.
- S 60th St Trail: Construct a trail from S Adams St to S Tyler St through Metro Parks Baseball Fields and along the north edge of Grays Middle School.
- S 56th St Bike Lanes: Add bike lanes along S 56th St from S Washington St to S Tyler St.
- S Washington Way Bike Lanes: Add bike lanes along S Washington Way from S 47th St to S 58th St.
- S 66th St Sharrows: Add sharrows on S 66th St from Lakewood Dr W to S Tyler St.

Feeder Transit

- Install improved bus stop zones at the two bus stops on S 56th St adjacent to the station with shelters and pedestrian amenities (Pierce Transit 2011).

- Identify, design, and implement transit signal priority and/or lane improvements that would benefit connections from the new University Place Town Center park-and-ride facility to the station (Pierce Transit 2011).

Infrastructure

- Bike Lockers: install eight new bike lockers and four new bike racks.

Parking

Policies that could increase access and manage the demand for parking at the South Tacoma Station could be implemented, such as:

- Parking pricing (if also implemented at Tacoma Dome and Lakewood Stations).

Lakewood Station

As with the South Tacoma Station, no existing station access data was available for the future Lakewood Sound Transit Station. Because this is a terminal station, there are many bus connections. Current bus/transit service is anticipated to change when the station opens. The Sound Transit Access Tool model predicts 970 riders would use Lakewood Station in 2010, which would increase to about 1,000 riders in 2030. The station area is bisected by I-5, which creates a significant access barrier for potential riders accessing the station by foot or bicycle. Therefore, the station-area population as defined by a ½-mile radius does not accurately reflect those within a comfortable walking distance of the station. Base ridership estimates were reduced to account for this access barrier.

Major improvements to Lakewood’s non-motorized transportation system are planned, including recommendations described on page 37 of the Lakewood Non-Motorized Transportation Plan. These improvements include constructing a pedestrian bridge in 2012, numerous bicycle facilities, and sidewalks in the vicinity of the station. The bridge will effectively triple the amount of residents within a 15-minute walk of the station as well as improve and increase bicycle access. In all, these pedestrian and bicycle access improvements may result in 260 additional riders to the 1,000 previously forecast, the vast majority of which would likely access the station as pedestrians (Table 4-12).

Table 4-12: Summary of Lakewood Station Access Analysis

Access Mode	Modeled 2010 Ridership	2030 ST Access Tool Model Forecast ^{1,2}	ST 2030 Fare Model Forecast with Mode/Land Use Shift	Change to 2030 ST Access Tool Model Forecast with Improvements ³
Auto (Park-and-Ride)		830	230	<10
Auto (Drop-off/Pick-up)		100	90	--
Feeder Transit		20	100	+<10
Bicycle		<10	<10	+20
Pedestrian		50	270	+240
TOTAL	970⁴	1,000	700	+260

1. 2030 ST Access Tool Model Forecast based on PSRC land use projections (through Sound Transit Access Tool).
2. Future planned auto parking supply is limited to 600 vehicles. If no additional parking is provided, some forecast auto access passengers may switch to other modes, park in the neighborhood, avoid accessing Sounder from this station altogether, or access transit via the nearby I-5/SR-512 park-and-ride.
3. This column describes the projected additional riders or reduction in riders to the 2030 ST Access Tool Model Forecast based on implementation of potential improvement projects, which are listed beginning on page 4-31 and in Appendix H.
4. A breakdown by access mode was not modeled as Sounder service had not begun at the Lakewood Station at the time of this study. The total Modeled 2010 Ridership is based on the November 2010 surveys and is modeled based on station-area population and employment.

The graphs shown below are based on PSRC land use projections for population and employment and the Sound Transit Access Tool Model. Figures 4-23 and 4-24 use the 2030 Maximum Growth projection applied to a “suburban-village” and “TOD” station type, respectively. The TOD type has a higher density than the existing (or future) Lakewood Station area, given current land use planning.

Figure 4-22: 2030 ST Access Tool Model Forecast

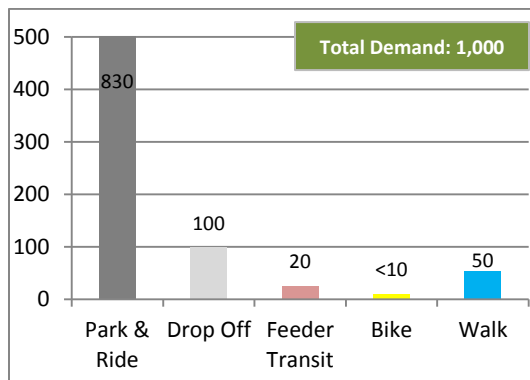


Figure 4-23: ST 2030 Fare Model Forecast without Mode/Land Use Shift

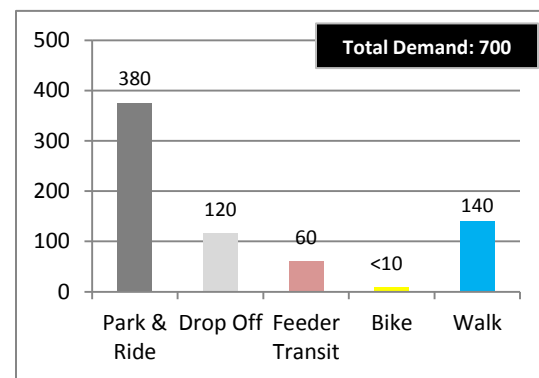
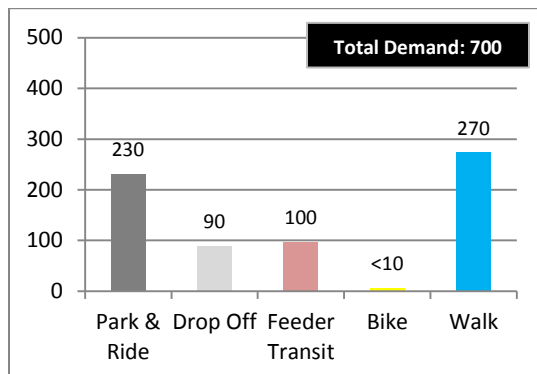


Figure 4-24: ST 2030 Fare Model Forecast with Mode/Land Use Shift



The following list of potential improvement projects and estimated costs came from a combination of city plans, input from the public, and/or observed conditions. This is a representative list of the types of access improvement projects that Sound Transit could choose to invest in or partner with the City of Lakewood.

Roads and Sidewalks

- Bridgeport Way SW Sidewalk: Add a sidewalk on the east side of Bridgeport Way SW from SB Interstate 5 Exit to McChord Dr SW.
- 111th/112th St SW Sidewalk: Expand the sidewalk on the south side of 112th St SW to meet with 111th St SW to form a continuous sidewalk from Bridgeport Way SW to Lakeview Ave SW (2009 Non-Motorized Transportation Plan).

- Lakeview Ave SW Sidewalk: Expand the sidewalk at the corner of 108th St SW and Lakeview along the west side of Lakeview Ave SW from 108th St SW to 112th St SW.
- 47th Ave SW Sidewalk: Add a sidewalk along the east side of 47th Ave SW from 108th St SW to 111th St SW.

Trails and Bike Lanes

- 112th St SW Bike Lanes: Add bike lanes, including signage and re-striping, on 112th St SW from Gravelly Lake Drive SW to 111th St SW (2009 Non-Motorized Transportation Plan).
- Bridgeport Way SW Sharrows: Add sharrows on Bridgeport Way SW from McChord Dr SW to Gravelly Lake Dr SW (2009 Non-Motorized Transportation Plan).
- Main St Sharrows: Add sharrows on Main St from Gravelly Lake Dr SW to 112th St SW.
- 47th Ave SW Bicycle Boulevard: Add a bicycle boulevard, including signage, from McChord Dr SW to Pacific Hwy SW with a new non-motorized link between 124th St Ct SW and 127th St Ct SW.
- 111th St SW/Lakeview Ave SW Bike Lanes: Add bike lanes where 111th St SW and Lakeview Ave SW converge; on Lakeview Ave SW from 108th St SW to 111th St SW; and on 111th St SW from 112th St SW to Lakeview Ave SW.

Infrastructure

- Bike Lockers: install four new bike lockers and four new racks.
- Install real-time parking availability signage.

Parking

Policies that could increase access and manage the demand for parking at the Lakewood Station could be implemented, such as:

- Parking pricing (if also implemented at Tacoma Dome and South Tacoma Stations).
- Expanded drop-off/pick-up capacity at the station.

Chapter 5: Station Access Improvement Projects Evaluation (Phase 6)

This chapter summarizes the results of the evaluation of the effectiveness of potential improvement projects for each station, developed from the list of projects detailed in Chapter 4. Each of the potential improvement projects were analyzed and ranked based on the top six evaluation criteria identified in Chapter 3.

Analysis Criteria

The analysis criteria were applied as follows:

- Cost Effectiveness (cost/new rider): To assess the value of potential specific station-area projects, the team conducted a high-level cost-benefit analysis on each project. Anticipated ridership effects were compared with the estimated construction costs to identify the cost per new rider. The costs of the proposed projects were also compared to the anticipated benefits to both new and existing riders. The costs were then annualized.
- Increases Ridership: For each project, the effect or potential increase in ridership by access mode were assessed. Bicycle- and pedestrian-oriented projects were reviewed considering proximity to the station, the value of improvement, and projected station-area land uses. Auto-oriented projects were reviewed considering projected ridership changes associated with the increase or decrease in parking supply, station-area roadway capacity changes, and implementation of parking pricing. Feeder bus projects were evaluated based on the increase or decrease in feeder bus service based on the value of the service change (in travel time or frequency), and the increased area served by the improvement.
- Leverages Previous Investments: The amount that the potential improvement projects would leverage existing investments to each Sounder station was also analyzed. This includes improvements to station-vicinity circulation, access, and connections to existing bicycle system networks near the station. Negative effects of projects that would require the removal or modification of existing station infrastructure, such as construction of a new parking garage on existing station parking areas which would temporarily displace existing parking spaces, were also considered.
- Decreases Travel Time, Increases Reliability: Faster travel times both to and from the station for various access modes were analyzed. Other benefits such as safety, improved intersection/railroad crossings, and parking availability information were shown to increase reliability.
- Partnership Potential with Other Agencies: The potential for cost-sharing by partnering with other agencies was considered. This includes potential partnerships with cities, transit service providers (e.g. King County Metro or Pierce Transit), and WSDOT.
- Environmental Benefits: The environmental benefits of each project were considered. This includes reductions in single-occupancy vehicles by facilitating bicycling and walking to the station, encouraging car/vanpools. Projects without a significant environmental benefit were ranked as “low.”

The projects were also evaluated using information gathered from public outreach conducted by Sound Transit in Fall 2011 and Spring 2012. An open house was held at each of the stations in the study, and surveys were gathered from riders with feedback on how to prioritize improvements (Appendix G).

The highest and lowest priorities from the rider surveys are summarized below by station- It should be noted that the highest priority improvements from the rider surveys does not necessarily match the highest ranked projects resulting from the consultant team evaluation:

- Mukilteo Station: highest = pedestrian connections; lowest = bicycle access
- Kent Station: highest = parking facilities; lowest = bicycle access
- Auburn Station: highest = parking facilities; lowest = bicycle access
- Sumner Station: highest = parking facilities; lowest = bicycle access
- Puyallup Station: highest = parking facilities; lowest = bicycle access
- Tacoma Dome Station: highest = parking facilities; lowest = bicycle access
- South Tacoma Station: highest = parking facilities and bus facilities; lowest = bicycle access.
- Lakewood Station: highest = parking facilities; lowest = drop-off/short-term access and pedestrian connections.

Station-by-Station Project Rankings Summary

The remainder of this chapter provides a summary of the project rankings by station. For each station a summary table is used to show the rankings by a symbol indicating “low”, “medium”, or “high”. For this report, the summary tables show the projects ranked in order of cost per new rider, starting with the lowest cost per rider. The other criteria may be used to prioritize projects. For additional details including a project description and rationale for each ranking, see the Evaluation Criteria Table shown in Appendix H. Select projects are shown on maps following each station’s table, corresponding to the map identification (Map ID) number listed on each table. A ¼- and ½-mile radius around the station is shown on each map in white.

Preliminary order-of-magnitude cost-estimates for selected proposed improvements projects are included in Appendix I.

Mukilteo Station

The highest-ranked project is installation of new bike lockers, which is projected to generate two new riders and has the lowest annualized cost per new rider (less than \$1.00). The Waterfront Pedestrian Bridge project is also highly ranked because of its benefits to new ridership, low annualized cost per new rider (approximately \$6.00), and benefits to travel time and reliability. In the survey of riders, improved pedestrian connections also ranked highest while bicycle access was rated lowest.

Overall, the potential improvement projects near Mukilteo Station have a moderate to high increase in riders, quicker travel times and increased reliability, and a high partnership potential. As the last two projects listed in Table 5-1 would not increase ridership, a cost per new rider is not calculable. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-1: Mukilteo Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
Bike lockers (<i>Not Shown on Map</i>)	●	●	●	●	◐	●
Waterfront Pedestrian Bridge (1)	●	●	◐	●	●	●
Parking Garage and Pedestrian Bridge (<i>Not Shown on Map</i>)	○	●	○	●	◐	○
Waterfront Promenade (2)	○	◐	○	●	●	●
Japanese Gulch Trail (3)	○	◐	●	●	●	◐
Shoreline Trail (4)	○	◐	○	◐	●	◐
Pedestrian Wayfinding (<i>Not Shown on Map</i>)	N/A	○	◐	◐	●	●
Parking Pricing (<i>Not Shown on Map</i>)	N/A	○	◐	◐	●	◐

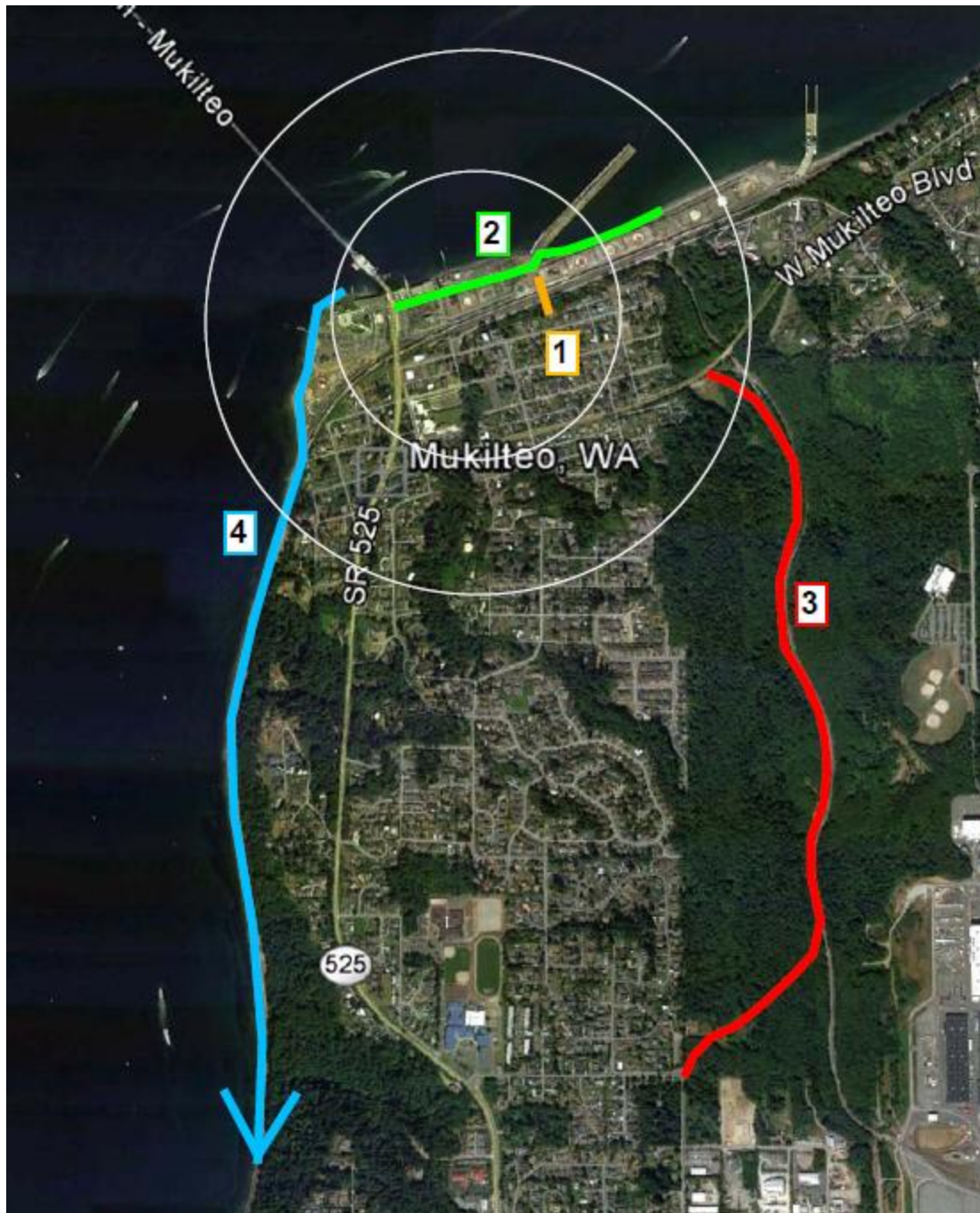
Key:

○ = low

◐ = medium

● = high

Figure 5-1: Mukilteo Station Project Map



Source: Google Earth PRO



























































Note: A 1/4- and 1/2-mile radius around the station is shown in white.

Kent Station


The highest-ranked project is the bike lockers installation project because of its low annualized cost per new rider (less than \$1.00) and high leveraging of previous investments. Also highly ranked was the Mill Creek Pedestrian Bridge, due to its high benefits to existing riders and high leveraging of previous investments. In the survey of riders, improved parking facilities were ranked highest while bicycle access was rated lowest.


Overall, the potential improvement projects near Kent Station have relatively high marks for all categories, with the exception of the following two projects which are not expected to increase ridership: parking pricing and real-time parking availability signage projects. A cost per new rider was not calculable for these projects. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-2: Kent Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
Bike Lockers (<i>Not Shown on Map</i>)						
Mill Creek Pedestrian Bridge (1)						
Reiten Rd Sidewalks (2)						
2nd Ave Bike Lane/Sharrow (3)						
Expand Drop-Off Capacity (<i>Not Shown on Map</i>)						
Shared Facility Project along James St (4)						
Reiten Rd Sharrows (5)						
Gowe St/Titus St Bike Lane/Sharrow (6)						
Parking Pricing (<i>Not Shown on Map</i>)	N/A					
Real-time Parking Availability Signage (<i>Not Shown on Map</i>)	N/A					

Key:

 = low

 = medium


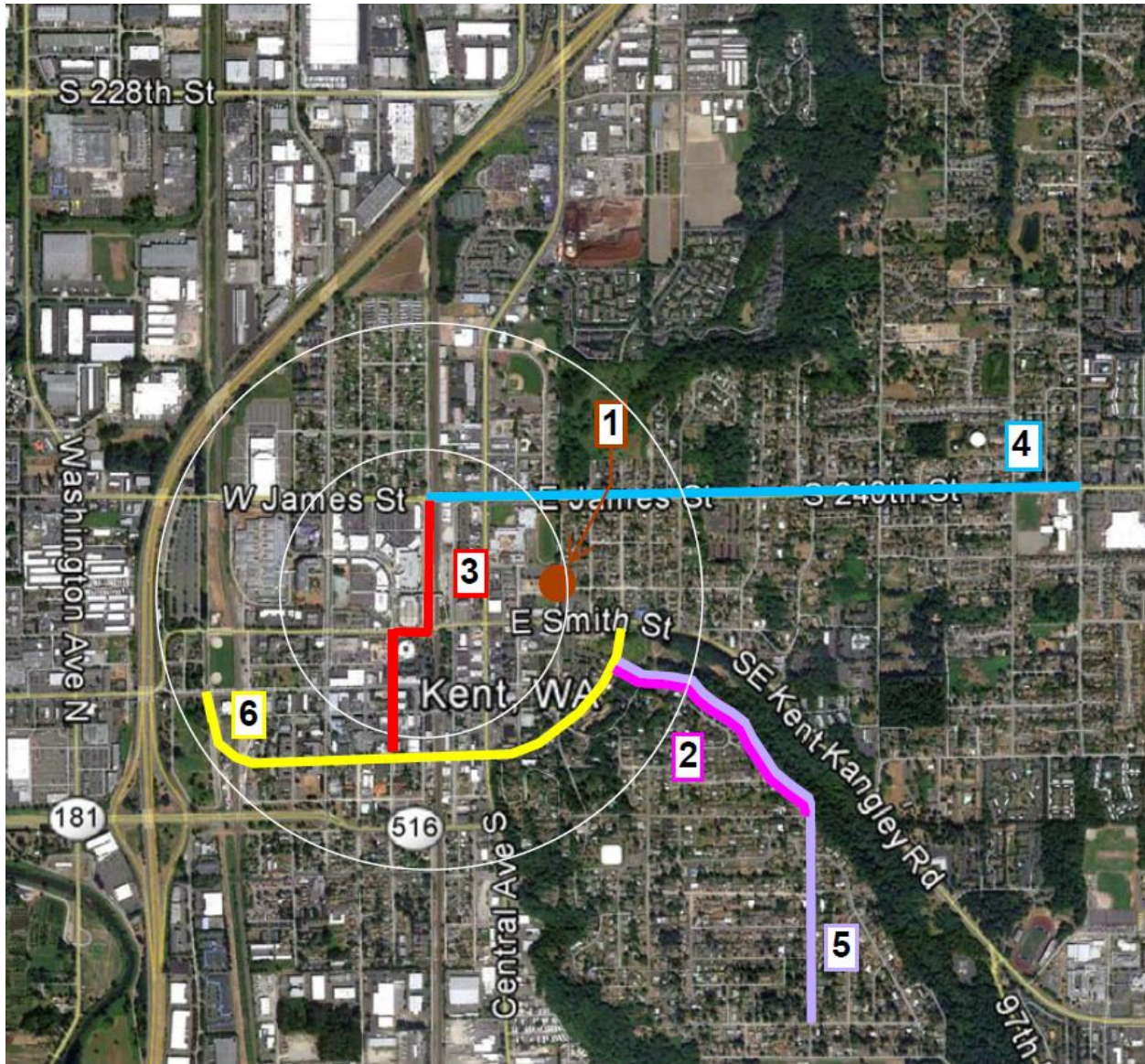
 = high

Figure 5-2: Kent Station Project Map



Source: Google Earth PRO

Note: A 1/4- and 1/2-mile radius around the station is shown in white.

Auburn Station

The highest-ranked project is the A St NE Bike Wayfinding and Bike Boulevard project, which would add wayfinding to a non-motorized trail connection and construct a sidewalk. The project is projected to attract up to 30 new riders daily and would have the lowest annualized cost per new rider (less than \$1.00). The C St SW Trail was also highly ranked because of its low annualized cost per new rider (less than \$1.00) and ridership increase (up to 16 new riders daily). In the survey of riders, improved parking facilities were ranked highest while bicycle access was rated lowest.

Overall, the potential improvement projects near Auburn Station have relatively high marks for all categories, with the exception of the parking garage project. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-3: Auburn Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
A St NE Bike Wayfinding and Bike Boulevard (1)	●	●	●	●	●	●
C St SW Trail (2)	◐	◐	●	●	●	●
A St SW Sharrows (3)	◐	◐	●	●	●	●
W Main St Bike Lanes (4)	◐	◐	●	●	●	●
2nd St SW Sharrows (5)	◐	◐	●	●	●	●
Expand Drop-Off Capacity (<i>Not Shown on Map</i>)	●	◐	●	○	●	○
Bike Lockers (<i>Not Shown on Map</i>)	●	◐	●	●	◐	●
A St NE Sidewalk and Ramp Improvements (<i>Not Shown on Map</i>)	◐	●	◐	●	●	◐
R St NE Bike Lanes (6)	○	○	●	●	●	●
Parking Garage (7)	○	○	○	●	◐	○
Parking Pricing (<i>Not Shown on Map</i>)	N/A	○	●	◐	●	◐
Real-time Parking Availability Signage (<i>Not Shown on Map</i>)	N/A	○	●	●	◐	○

Key:



= low

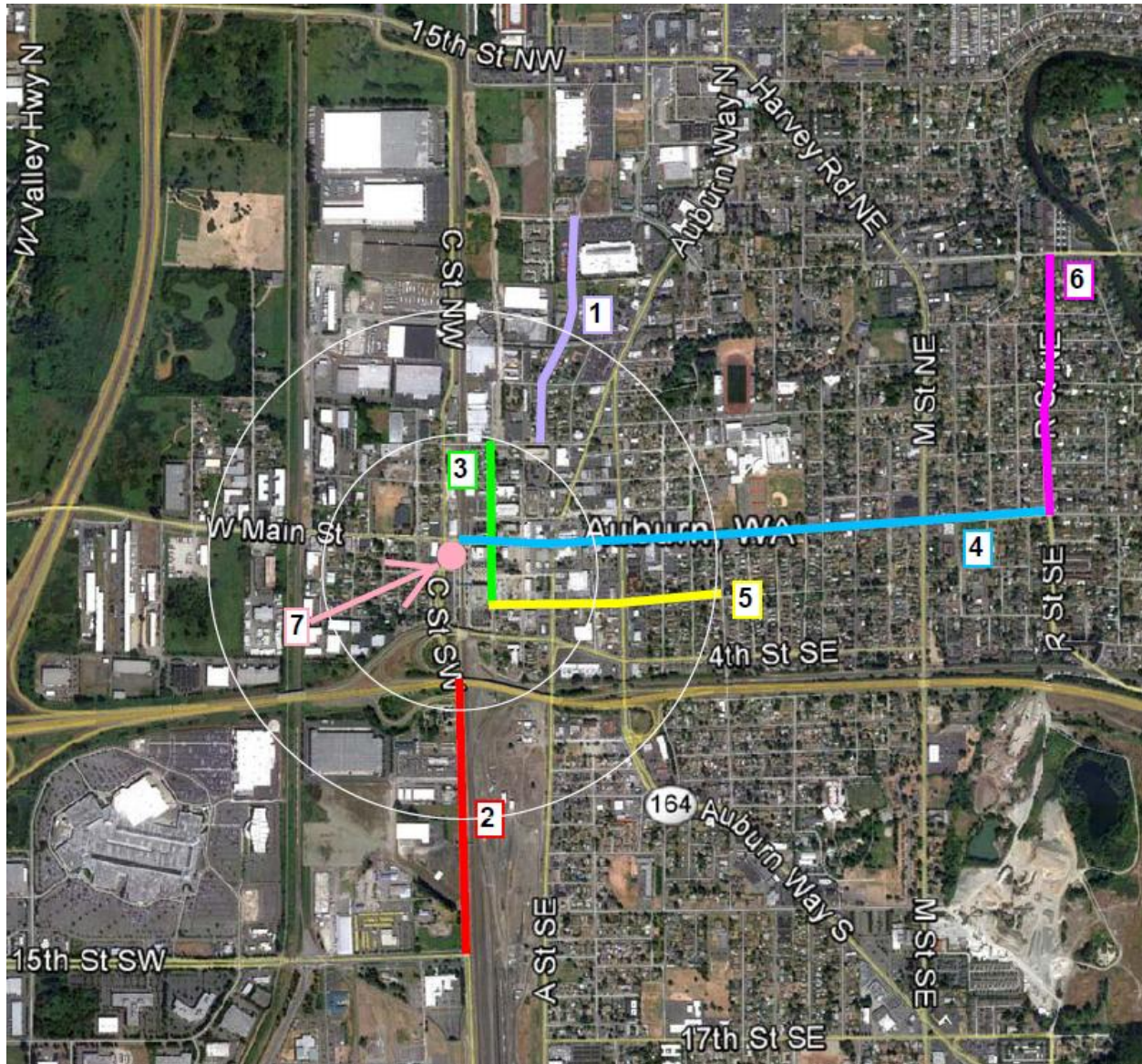


= medium



= high

Figure 5-3: Auburn Station Project Map



Source: Google Earth PRO

Note: A ¼- and ½-mile radius around the station is shown in white.

Sumner Station

The highest-ranked project is the Linden Dr/SR 410 Crossing Improvements project, which would include construction of sidewalks north and south of the bridge crossing SR 410. This project would have the lowest annualized cost per new rider (less than \$1.00) and could attract up to 40 new riders per day. The Academy St Bike Boulevard project was also highly ranked because of its low annualized cost per new rider (less than \$1.00), a projected increase of up to 60 new riders per day, and its positive environmental benefits. In the survey of riders, improved parking facilities were ranked highest while bicycle access was rated lowest.

Overall, the potential improvement projects near Sumner Station have a mixture of high and low marks for ridership, cost per new rider, leveraging of previous investments, and environmental benefits. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-4: Sumner Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
Linden Dr/SR 410 Crossing Improvements (1)	●	◐	●	◐	●	●
Academy St Bike Boulevard (2)	●	●	●	●	●	●
Riverwalk Trail Access Point (3)	●	○	●	●	●	●
Puyallup River Trail Extension (4)	●	◐	●	●	●	◐
Bike Lockers (<i>Not Shown on Map</i>)	●	○	◐	●	◐	●
White River Trail Extension (5)	●	○	○	○	●	◐
Parking Garage – Large (<i>Not Shown on Map</i>)	○	●	○	●	◐	○
Parking Garage – Small (<i>Not Shown on Map</i>)	○	●	○	◐	◐	○
Station Pedestrian Bridge (6)	○	◐	○	●	◐	○
SR 410 Non-Motorized Bridge (<i>Not Shown on Map</i>)	○	◐	●	●	●	◐
Parking Pricing (<i>Not Shown on Map</i>)	N/A	○	●	●	◐	◐
Expand Drop-Off Capacity (<i>Not Shown on Map</i>)	N/A	◐	●	○	●	○

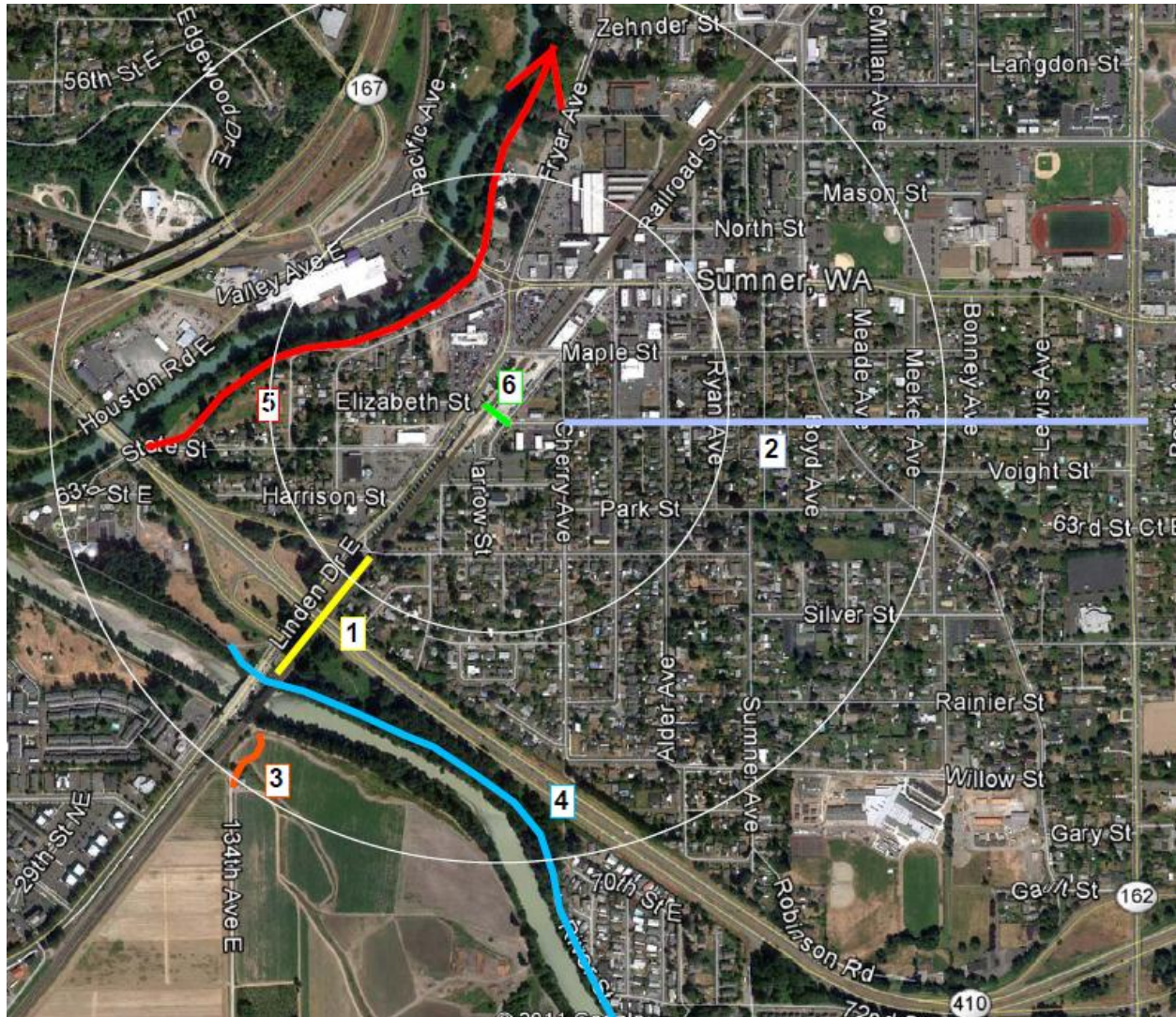
Key:

○ = low

◐ = medium

● = high

Figure 5-4: Sumner Station Project Map



Source: Google Earth PRO

Note: A 1/4- and 1/2-mile radius around the station is shown in white.












Puyallup Station

The highest-ranked project is the 2nd St SW Sharrow/Bicycle Boulevard project, which would include construction of a bicycle boulevard on 2nd St SW from E Main to 9th Ave SW. This project would have the lowest annualized cost per new rider (less than \$1.00), would provide quicker travel time for bicyclists, have a high partnership potential, and benefit the environment. The Station Area Crosswalk Improvements project was also highly ranked because of its high projected ridership (up to 60 new riders daily) and low annualized cost per new rider (less than \$1.00). In the survey of riders, improved parking facilities were ranked highest while bicycle access was rated lowest.

Overall, the potential improvement projects near Puyallup Station have generally low projected ridership increases and high costs per new rider but would provide benefits to travel time and reliability, and have high partnership potentials. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-5: Puyallup Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
2nd St SW Sharrow / Bicycle Boulevard (1)	●	◐	◐	●	●	●
Station Area Crosswalk Improvements (2)	●	●	●	◐	●	○
Railroad Crossing Improvements (3)	●	●	○	◐	●	○
4th St NW Bike Lane (4)	◐	○	●	●	●	●
W Main Ave Sharrows and Bike Lanes (5)	○	○	●	●	●	●
7th Ave Bike Lanes and Sharrow (6)	○	○	●	●	●	●
Parking Garage – Large (<i>Not Shown on Map</i>)	○	○	○	●	◐	○
Parking Garage – Medium (<i>Not Shown on Map</i>)	○	○	○	◐	◐	○
7th St SW Bicycle Boulevard (7)	○	○	●	●	●	●
Station Pedestrian Bridge (8)	○	●	○	●	◐	○
Parking Garage – Small (<i>Not Shown on Map</i>)	○	○	○	◐	◐	◐
21st Ave NW to 4th St NW Bike Boulevard (9)	○	○	●	●	●	●
Turning Radius Improvements (10)	–	◐	●	●	●	○
Real-time Arrival Signs (<i>Not Shown on Map</i>)	N/A	○	○	●	◐	○

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
Drop-Off Capacity Improvements (<i>Not Shown on Map</i>)	N/A					
Parking Pricing (<i>Not Shown on Map</i>)						

Key:



= low

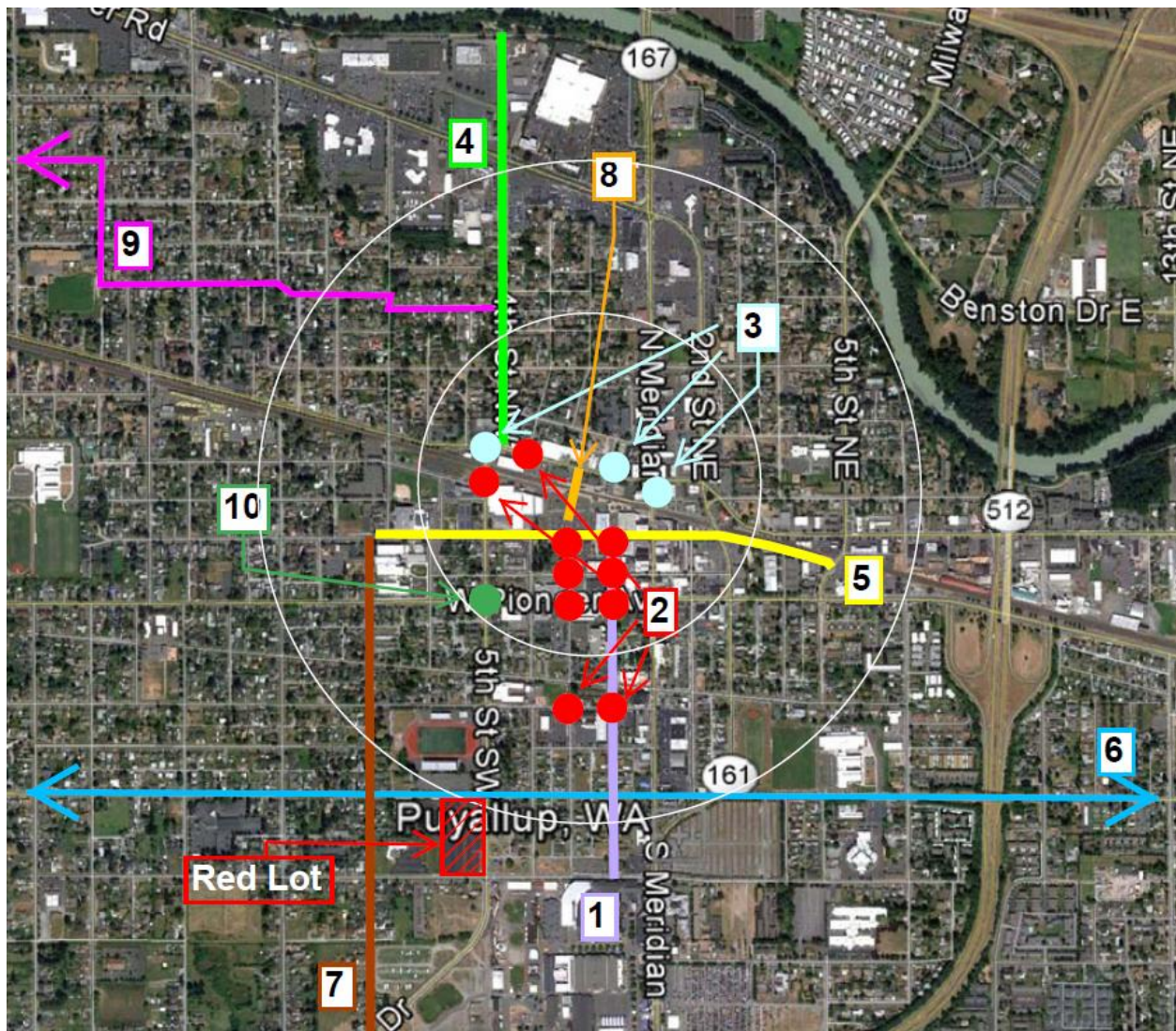


= medium



= high

Figure 5-5: Puyallup Station Project Map



Source: Google Earth PRO

Note: A 1/4- and 1/2-mile radius around the station is shown in white.






Tacoma Dome Station

The highest-ranked project is the E K St/E Wright Ave Bike Boulevard project, which would construct a bicycle boulevard along E K St and E Wright Ave from McKinley Park to the Pipeline Trail. This project would attract up to 15 new daily riders and would have the lowest annualized cost per new rider (less than \$1.00). The Puyallup Ave Crossing Improvement project was also highly ranked because of its benefits to ridership (up to 20 new riders), low annualized cost per new rider (less than \$1.00), and high partnership potential. In the survey of riders, improved parking facilities were ranked highest while bicycle access was rated lowest.


Overall, the potential improvement projects near the Tacoma Dome Station have benefits for travel time and reliability, high partnership potential, and relatively low increases in ridership. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.


Table 5-6: Tacoma Dome Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
E K St/E Wright Ave Bike Boulevard (1)	●	◐	●	●	●	●
Puyallup Ave Crossing Improvement (2)	●	◐	○	●	●	○
E L St Climbing Bike Lane / Sharrow Combination & Bike Boulevard (3)	●	◐	◐	●	●	●
Bike lockers (<i>Not Shown on Map</i>)	●	○	◐	●	◐	●
Puyallup Ave Bike Lanes (4)	◐	○	●	●	●	●
Portland Ave Bike Lanes (5)	◐	○	●	●	●	●
Pipeline Trail (6)	◐	○	○	●	●	●
Contribute to Parking Garage (<i>Not Shown on Map</i>)	◐	●	○	●	◐	○
Prairie Line Trail – Phase 2 (Water Ditch Trail Ext.) (7)	○	◐	◐	◐	◐	◐
Station Pedestrian Bridge (8)	○	◐	●	●	◐	○
Station-Area Pedestrian Lighting (9)	N/A	○	○	●	●	○
Real-time Parking Availability Signage (<i>Not Shown on Map</i>)	N/A	○	●	●	◐	○
E G St Boarding Area and Layover Zone Improvements (10)	–	○	●	●	●	●
E McKinley Way Bike Lanes (11)	N/A	○	●	●	●	●

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
Parking Pricing (<i>Not Shown on Map</i>)	N/A					

Key:

 = low

 = medium


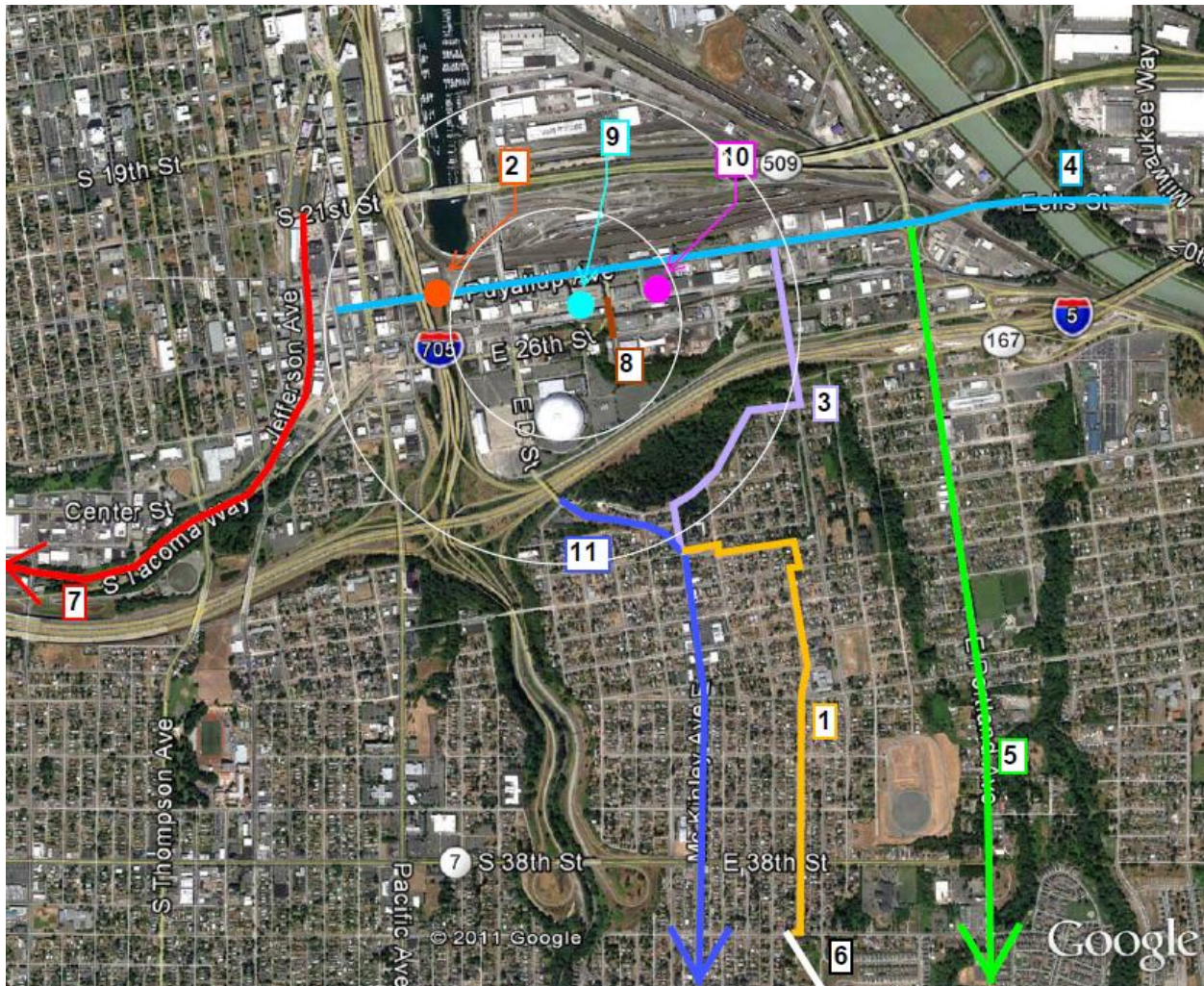
 = high

Figure 5-6: Tacoma Dome Station Project List



Source: Google Earth PRO

Note: A 1/4- and 1/2-mile radius around the station is shown in white.

South Tacoma Station

The highest-ranked project is to improve sidewalks near the station, which would include construction of street lighting, sidewalks and curb ramps between the South Tacoma Station and the business district near S 56th St. This access improvement could attract up to 33 new daily riders and would have the lowest annualized cost per new rider (less than \$1.00). The S 60th St Trail project was also highly ranked because of its high new daily riders estimate (up to 40), its low annualized cost per new rider (less than \$1.00), and its high marks for all other categories. In the survey of riders, improved parking and transit facilities were ranked highest while bicycle access was rated lowest.

Overall, the potential improvement projects near the South Tacoma Station would leverage previous investments, would provide benefits to travel time and reliability, would have a high partnership potential, and moderate ridership increases. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-7: South Tacoma Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
Sidewalks Improvements near Station (1)	●	●	●	◐	●	○
S 60th St Trail (2)	●	●	●	●	●	●
S 58th St Non-Motorized Connection (3)	●	●	●	●	●	●
Bike lockers (<i>Not Shown on Map</i>)	●	◐	●	●	◐	●
S Tacoma Way Crossing Improvements (4)	◐	◐	●	◐	●	○
S 56th St Crossing Improvements (5)	◐	◐	●	◐	●	○
S 54th St/S Railroad St Bike Boulevard (6)	○	◐	●	●	●	●
S Washington Way Bike Lanes (7)	◐	◐	●	◐	◐	◐
Water Ditch Trail TAC-40 (8)	◐	●	●	●	●	●
Oaks St Bike Lane (9)	○	◐	◐	◐	●	◐
Station Area Access Improvements (10)	○	◐	●	◐	◐	○
S 66th St Bike Boulevard (11)	○	◐	●	●	●	●
S 56th St Bike Lanes (12)	○	◐	◐	●	●	●
S 66th St Sharrows (13)	○	○	●	●	●	●

Lakewood Station

The highest-ranked project is the 47th Ave SW Sidewalk project, which would include construction of a sidewalk along 47th Ave SW from 108th St SW to 111th St SW. This project is projected to attract up to 24 new daily riders and would have the lowest annualized cost per new rider (less than \$1.00). The Lakeview Ave SW Sidewalk project was also highly ranked because of its low annualized cost per new rider (less than \$1.00), its benefits to travel time and reliability, high partnership potential, and environmental benefits. In the survey of riders, improved parking facilities were ranked highest while drop-off/short-term access and pedestrian connections were rated lowest.

Overall, the potential improvement projects near Lakewood Station have low to moderate ridership increases, high partnership potentials, high environmental benefits, and leverage previous investments. As the last four projects listed in Table 5-8 would not increase ridership, a cost per new rider is not calculable. These projects, along with the rationale for each ranking, are described in greater detail in Appendix H.

Table 5-8: Lakewood Station – Potential Improvement Projects

Project Name (<i>Map ID</i>)	Cost/New Rider	Ridership	Leverages Investments	Travel Time & Reliability	Partnership	Environment
47th Ave SW Sidewalk (1)	●	◐	●	●	●	●
Lakeview Ave SW Sidewalk (2)	●	◐	◐	●	●	●
47th Ave SW Bike Boulevard (3)	●	●	●	●	●	●
111th/112th St SW Sidewalk (4)	●	◐	●	●	●	●
111th St SW/Lakeview Ave SW Bike Lanes (5)	◐	○	◐	●	●	●
Bike lockers (<i>Not Shown on Map</i>)	◐	○	●	●	◐	●
Bridgeport Way SW Sidewalk (6)	◐	◐	●	○	○	○
112th St SW Bike Lanes (7)	◐	◐	◐	◐	●	●
Main St Sharrows (8)	○	○	◐	◐	●	●
Bridgeport Way SW Sharrows (9)	N/A	○	◐	●	●	●
Real-time Parking Availability Signage (<i>Not Shown on Map</i>)	N/A	○	●	●	◐	○
Parking Pricing (<i>Not Shown on Map</i>)	N/A	○	◐	◐	●	◐
Expand Drop-Off Capacity (<i>Not Shown on Map</i>)	N/A	○	●	○	●	○

Key:

○ = low

◐ = medium

● = high

[illegible]

Note: A ¼- and ½-mile radius around the station is shown in white.

Appendix A

Acronyms

Acronyms

BNSF	Burlington Northern Santa Fe Railway
CTR	commute trip reduction
EIS	Environmental Impact Statement
FAZs	Forecast Analysis Zones
GMA	Growth Management Act
GTEC	Growth and Transportation Efficiency Center
HOV	high occupancy vehicle
I-	Interstate
LIFT	Local Infrastructure Financing Tool
MIC	Manufacturing/Industrial Center
PSRC	Puget Sound Regional Council
PT	Pierce Transit
SR	State Route
ST	Sound Transit
TCRB	Transit Cooperative Research Program
TOC	Transit-Oriented Commercial
TOD	Transit-Oriented Development
UGA	urban growth area
WSF	Washington State Ferry
WUTC	Washington Utilities and Trade Commission

Appendix B
Sounder/Express Rider Survey



Sound Transit is conducting this survey to determine how far riders travel to a particular station and how they get there. Data collected will help the agency make decisions about possible future station improvements.

1. *What is the intersection nearest your home?*

Street: _____ and _____ City: _____
(nearest street) (nearest cross-street)

Zip code: _____

2. *At which station did you board Sounder today?* _____

3. *At which station will you get off Sounder today?* _____

4. *How many trips will you take on Sounder this week? (Count each direction as a separate trip)*
_____ trips

5. *How did you travel from home to this Sounder station today?*

Please check the box next to the one best response.

- ☐ Walked ___ blocks from home
☐ Bicycled and left bicycle at station
☐ Bicycled and brought bicycle on board
☐ Rode bus – Route # _____
☐ Took the ferry
☐ Rode a motorcycle
☐ I was dropped off by car at the station
☐ I carpooled with someone else, e.g. a friend or co-worker (I didn't drive)
☐ I drove and parked in the Sounder Park and Ride lot at the station
☐ I drove and parked at a nearby Park and Ride lot and took a shuttle bus to the station
☐ I drove and parked at a nearby pay lot and I paid \$____
☐ I drove and parked nearby on the street and walked _____ blocks
☐ Other: _____
(please describe)

6. *What is the purpose of your trip on Sounder today?*

☒ Work ☐ School ☐ Other: _____
(please describe)

7. *Please let us know if you have comments or suggestions for improving access to this Sounder Station.*

Thank you for your assistance!



Sound Transit is conducting this survey to determine how far riders travel to a particular transit center and how they get there. Data collected will help the agency make decisions about possible future facility improvements.

1. *What is the intersection nearest your home?*

Street: _____ and _____ City: _____
(nearest street) (nearest cross-street)

Zip code: _____

2. *How many trips will you take on Sound Transit this week? (Count each direction as a separate trip)*
_____ trips

3. *How did you travel from home to the Lakewood Transit Center today?*

Please check the box next to the one best response.

- ☐ Walked ____ blocks from home
- ☐ Bicycled and left bicycle at station
- ☐ Bicycled and brought bicycle on board
- ☐ Rode bus – Route # _____
- ☐ Took the ferry
- ☐ I was dropped off by car at the station
- ☐ I carpooled with someone else, e.g. a friend or co-worker (I didn't drive)
- ☐ I drove and parked in the Sounder Park and Ride lot at the station
- ☐ I drove and parked at a nearby Park and Ride lot and took a shuttle bus to the station
- ☐ I drove and parked at a nearby pay lot and I paid \$_____
- ☐ I drove and parked nearby on the street and walked _____ blocks
- ☐ Other: _____
(please describe)

4. *What is the purpose of your trip on Sounder today?*

☐ Work ☐ School ☐ Other: _____
(please describe)

5. *Please let us know if you have comments or suggestions for improving access to this station.*

Thank you for your assistance!

Sound Transit November 2010 Rider Survey Results Overview - EVERETT

# of Surveys	Everett
	51

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	1	0	0	3	0	0	4	1	38	0	0	3	0
	2%	0%	0%	6%	0%	0%	8%	2%	76%	0%	0%	6%	0%

City	Everett	Lake Stvns	Marysville	Snohomish	Other
	20	9	8	4	9
	40%	18%	16%	8%	18%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	0	0	1	1	45	0	1	0	0
	0%	0%	0%	2%	2%	94%	0%	2%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	5	5	7	5	29	0
	10%	10%	14%	10%	57%	0%

Purpose of Trip	Work	School	Other
	49	0	2
	96%	0%	4%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	2	2	4	2	1	0	2	2	0	0	3	34
	4%	4%	8%	4%	2%	0%	4%	4%	0%	0%	6%	65%

Sound Transit November 2010 Rider Survey Results Overview - MUKILTEO

# of Surveys	Mukilteo
	30

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	0	0	0	0	7	0	2	0	19	0	0	0	1
	0%	0%	0%	0%	24%	0%	7%	0%	66%	0%	0%	0%	3%

City	Clinton	Everett	Langley	Mukilteo	Other
	4	7	4	12	3
	13%	23%	13%	40%	10%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	0	0	0	0	0	24	1	4	1
	0%	0%	0%	0%	0%	0%	80%	3%	13%	3%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	0	0	2	6	21	0
	0%	0%	7%	21%	72%	0%

Purpose of Trip	Work	School	Other
	30	0	0
	100%	0%	0%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	11	6	3	0	0	0	1	0	1	0	0	11
	33%	18%	9%	0%	0%	0%	3%	0%	3%	0%	0%	33%

Sound Transit November 2010 Rider Survey Results Overview - EDMONDS

# of Surveys	Edmonds
	2

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	0	0	0	0	0	0	0	0	2	0	0	0	0
	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

City	Edmonds	Lynnwood
	1 50%	1 50%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	0	0	1	1	0	0	0	0	0
	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	0	0	0	0	0	2
	0%	0%	0%	0%	0%	100%

Purpose of Trip	Work	School	Other
	2	0	0
	100%	0%	0%

[illegible]

Sound Transit November 2010 Rider Survey Results Overview - KING STREET

of Surveys

King St

44

Travel to Station

Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
9	0	7	12	2	0	4	0	3	3	1	0	0
22%	0%	17%	29%	5%	0%	10%	0%	7%	7%	2%	0%	0%

City

Bain Isl	Bremerton	Puyallup	Seattle	Tacoma	Other
2	2	2	28	2	6
5%	5%	5%	67%	5%	14%

Station Alighted

Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
12	6	7	9	10	0	0	0	0	0
27%	14%	16%	20%	23%	0%	0%	0%	0%	0%

Trips per Week

1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
8	5	10	9	11	1
18%	11%	23%	20%	25%	2%

Purpose of Trip

Work	School	Other
38	1	0
97%	3%	0%

Comments

Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
3	4	10	2	1	1	2	1	1	1	3	18
6%	9%	21%	4%	2%	2%	4%	2%	2%	2%	6%	38%

Sound Transit November 2010 Rider Survey Results Overview - TUKWILA

# of Surveys	Tukwila
	22

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	1	0	1	2	0	0	6	0	11	0	0	0	0
	5%	0%	5%	10%	0%	0%	29%	0%	52%	0%	0%	0%	0%

City	Burien	Renton	Tukwila	Other
	2	11	3	5
	10%	52%	14%	24%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	4	4	2	4	0	0	8	0	0	0
	18%	18%	9%	18%	0%	0%	36%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	0	3	2	6	11	0
	0%	14%	9%	27%	50%	0%

Purpose of Trip	Work	School	Other
	20	2	0
	91%	9%	0%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	1	3	4	2	1	0	1	0	0	0	1	9
	5%	14%	18%	9%	5%	0%	5%	0%	0%	0%	5%	41%

Sound Transit November 2010 Rider Survey Results Overview - KENT

# of Surveys	Kent
	146

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	9	0	0	8	0	1	17	2	104	1	0	3	0
	6%	0%	0%	6%	0%	1%	12%	1%	72%	1%	0%	2%	0%

City	Auburn	Covington	Kent	Maple Vly	Other
	14	16	102	5	6
	10%	11%	71%	3%	4%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	8	4	1	2	1	1	129	0	0	0
	5%	3%	1%	1%	1%	1%	88%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	3	11	12	19	100	0
	2%	8%	8%	13%	69%	0%

Purpose of Trip	Work	School	Other
	133	10	0
	93%	7%	0%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	26	10	32	7	6	0	6	2	0	0	8	63
	16%	6%	20%	4%	4%	0%	4%	1%	0%	0%	5%	39%

Sound Transit November 2010 Rider Survey Results Overview - AUBURN

# of Surveys	Auburn
	343

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	9	1	4	54	0	2	43	13	162	10	10	25	3
	3%	0%	1%	16%	0%	1%	13%	4%	48%	3%	3%	7%	1%

City	Algona	Auburn	Bonney Lk	Covington	Enumclaw	Federal Way	Kent	Lake Tapps	Maple Valley	Pacific	Other
	12	226	5	11	19	6	5	16	8	10	21
	4%	67%	1%	3%	6%	2%	1%	5%	2%	3%	6%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	0	0	0	6	22	314	0	0	1
	0%	0%	0%	0%	2%	6%	92%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	15	18	33	49	225	3
	4%	5%	10%	14%	66%	1%

Purpose of Trip	Work	School	Other
	305	30	1
	91%	9%	0%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	91	13	39	18	16	3	9	5	6	7	9	149
	25%	4%	11%	5%	4%	1%	2%	1%	2%	2%	2%	41%

Sound Transit November 2010 Rider Survey Results Overview - SUMNER

# of Surveys	Sumner
	270

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	10	4	2	19	0	2	37	1	94	9	2	83	3
	4%	2%	1%	7%	0%	1%	14%	0%	35%	3%	1%	31%	1%

City	Bonney Lk	Buckley	Edgewood	Lake Tapps	Orting	Puyallup	Sumner	Other
	100	18	11	14	28	36	47	15
	37%	7%	4%	5%	10%	13%	17%	6%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	0	0	0	12	47	201	0	0	0
	0%	0%	0%	0%	5%	18%	77%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	5	12	25	57	168	3
	2%	4%	9%	21%	62%	1%

Purpose of Trip	Work	School	Other
	251	14	0
	95%	5%	0%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	105	17	20	18	17	4	9	1	3	2	6	96
	35%	6%	7%	6%	6%	1%	3%	0%	1%	1%	2%	32%

Sound Transit November 2010 Rider Survey Results Overview - PUYALLUP

# of Surveys	Puyallup
	270

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	11	1	2	16	0	1	32	9	123	13	2	52	2
	4%	0%	1%	6%	0%	0%	12%	3%	47%	5%	1%	20%	1%

City	Eatonville	Graham	Puyallup	Spanaway	Tacoma	Other
	5	16	204	11	14	14
	2%	6%	77%	4%	5%	5%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	0	0	0	13	36	214	0	0	0
	0%	0%	0%	0%	5%	14%	81%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	3	13	21	47	186	0
	1%	5%	8%	17%	69%	0%

Purpose of Trip	Work	School	Other
	258	6	0
	98%	2%	0%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	54	31	28	10	23	2	9	3	2	0	11	120
	18%	11%	10%	3%	8%	1%	3%	1%	1%	0%	4%	41%

Sound Transit November 2010 Rider Survey Results Overview - TACOMA

# of Surveys	Tacoma
	148

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	3	0	2	4	0	0	12	4	109	2	0	6	3
	2%	0%	1%	3%	0%	0%	8%	3%	75%	1%	0%	4%	2%

City	Gig Harbor	Lakewood	Olympia	Spanaway	Tacoma	Univ Place	Other
	11	5	7	7	92	13	12
	7%	3%	5%	5%	63%	9%	8%

Station Alighted	Tacoma	Puyallup	Sumner	Auburn	Kent	Tukwila	King Street	Edmonds	Mukilteo	Everett
	0	1	0	0	13	36	96	0	0	0
	0%	1%	0%	0%	9%	25%	66%	0%	0%	0%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	7	13	27	25	75	1
	5%	9%	18%	17%	51%	1%

Purpose of Trip	Work	School	Other
	137	6	2
	94%	4%	1%

Comments	Parking	Stations	Schedule	Buses	Fares	Shuttles	Train Car	Route	Comm	Misc	Compliment	No Cmt
	3	19	14	9	6	13	8	4	0	0	6	0
	4%	23%	17%	11%	7%	16%	10%	5%	0%	0%	7%	0%

Sound Transit November 2010 Rider Survey Results Overview - LAKEWOOD

# of Surveys	Lakewood
	28

Travel to Station	Walked	Bike+Station	Bike+Board	Bus	Ferry	Motorcycle	Drop-Off	Carpool	Park & Ride	Shuttle	Pay Lot	Street Park	Other
	0	1	0	6	0	0	0	2	19	0	0	0	0
	0%	4%	0%	21%	0%	0%	0%	7%	68%	0%	0%	0%	0%

City	Tacoma	Spanaway	Olympia/Lacey	DuPont	Lakewood	Other
	7	2	6	7	3	3
	25%	7%	21%	25%	11%	11%

Trips per Week	1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	10+
	1	0	2	6	0	19
	4%	0%	7%	21%	0%	68%

Purpose of Trip	Work	School	Other
	26	2	0
	93%	7%	0%

Appendix C
Winter 2011 Public Outreach and Open House Summary

Public Outreach and Open House Summary (Phase 2)

Sound Transit and URS hosted a series of six public open house events during Phase 2 of the project to secure feedback to help inform possible future investments by Sound Transit at eight of its Sounder Commuter Rail stations.

The objectives of the open houses were to:

- Generate awareness about the Study among target audiences
- Encourage public participation
- Generate feedback that will help ensure future changes to the station are reflective of the individual needs of each community

Kent - Wednesday, Jan. 26, 2011

Kent Senior Activity Center
600 E Smith St. Kent, WA 98030

Auburn - Thursday, Jan. 27, 2011

Auburn City Hall: Council Chamber
25 W Main St. Auburn, WA 98001

Sumner - Wednesday, Jan. 19, 2011

Sumner High School Commons
1707 Main St. Sumner, WA 98390

Puyallup - Thursday, Jan. 20, 2011

City of Puyallup City Hall: Chamber Hall
333 S Meridian Puyallup, WA 98371

Tacoma - Tuesday, Jan. 18, 2011

University of Washington-Tacoma
Jane Russell Commons
1918 Pacific Ave. Tacoma, WA 98402

Lakewood - Tuesday, Jan. 25, 2011

Boys & Girls Club
10402 Kline St SW Lakewood, WA 98499

Additional outreach was conducted in the Fall 2011/Winter 2012 and results can be found in Appendix G.

The format of the Open House events featured six information stations staffed by Sound Transit, URS or Transpo Group employees.

- Station One: Basic information about Sound Transit; funding, routes, ridership, budget and future area investments
- Station Two: Overview about the Access Study and its goals, desired outcomes and timelines
- Station Three: An aerial map with information about the existing conditions at each station and opportunity to discuss potential improvements
- Station Four: Collect feedback about how people travel to the stations
- Station Five: Provide a variety of opportunities to engage and garner comment
- Station Six: Bike Station and other third-party/partner organizations (Pierce County Metro, etc.)

All of the open houses were held between the hours of 4:00 and 7:00 p.m. Attendance at the events ranged from 18 – 38 people. Most individuals were very engaged and attended the event to comment about very specific ideas, suggestions or complaints. All comments are categorized in terms of the following broad categories:

- Access Issues
- Parking
- Schedule / Service
- Station Improvements
- Communication
- Route
- Ticketing
- Miscellaneous

In total, 172 individuals attended public meetings and left 99 original comment forms. In addition, 11 comments were mailed in after the event. The total number of comments (many comment forms had multiple comments) was 245. Comments were also received from Pierce Transit (see Attachment 1).

Each station has its own particular issues and touch points, for some it was parking and others bicycle/pedestrian access. Similar themes for all stations had to do with more service hours and better connections with Pierce Transit. Outlined below is an overview of the feedback both in terms of comment forms and in comments provided at the aerial map station staffed by URS and/or Transpo; a more detailed summary of specific feedback received at each event follows.

Kent

The Kent Open House was held on Wednesday, January 26 at the Kent Senior Center. The event was attended by 38 people who left 16 unique comment forms, with two more people emailing comments; totaling 47 specific comments. The majority of comments were about access. Representatives of the Kent Bicycle Advisory Board attended the open house; their comments are included as pages 13-18 of this Appendix.

Table 1: Kent Comment Summary

Comment Topic	Number of Comments Received on Topic
Access	16
Parking	10
Schedule / Service	9
Station	8
Communication	2
Route	1
Miscellaneous	1

Auburn

The Auburn Open House was held on Thursday, January 27 in Council Chamber at Auburn City Hall. The event was attended by 35 people who left 20 unique comment forms, for a total of 39 specific comments. The majority of comments were about parking.

Table 2: Auburn Comment Summary

Comment Topic	Number of Comments Received on Topic
Parking	22
Schedule / Service	10
Station	3
Access	2
Communication	1
Miscellaneous	1

Sumner

The Sumner Open House was held on Wednesday, January 19 at Sumner High School. The event was attended by 26 people who left 21 unique comment forms, with 32 specific comments. The majority of the comments were related to parking.

Table 3: Sumner Comment Summary

Comment Topic	Number of Comments Received on Topic
Parking	15
Schedule / Service	6
Station	5
Access	2
Route	2
Miscellaneous	2

Puyallup

The Puyallup Open House was held on Thursday, January 20 in Council Chambers at the Puyallup City Hall. The event was attended by 26 people who left 21 unique comment forms with seven more people emailing comments, totaling 81 specific comments. The majority of comments were about parking. (Note: the building automatically locked at 5:00 p.m., so there was a half-hour period where no one could access the open house. The situation was rectified and the rental fee was refunded.)

Table 4: Puyallup Comment Summary

Comment Topic	Number of Comments Received on Topic
Parking	23
Schedule / Service	19
Access	17
Station	13
Communication	3
Ticketing	2
Miscellaneous	4

Tacoma

The Tacoma Open House was held on Tuesday, January 18 at the Jane Russell Commons at the University of Washington, Tacoma. The event was attended by 28 people who left 18 unique comment forms, with 42 specific comments. The majority of the comments were about access. An additional eight comments were received by separate letter. The Tacoma event addressed both the Tacoma Dome and South Tacoma Sounder Stations. The event had a large turnout from the bicycle / pedestrian community, including many members of the City of Tacoma Bicycle / Pedestrian Advisory Committee. Comments from the Bicycle / Pedestrian Advisory Committee are included as pages 38-42 of this Appendix.

Table 5: Tacoma Comment Summary

Comment Topic	Number of Comments Received on Topic
Access	31
Parking	5
Schedule / Service	4
Station	3
Miscellaneous	7

Lakewood

The Lakewood Open House was held on Tuesday, January 25 at the Lakewood Boys and Girls Club. The event was attended by 19 people who left 3 unique comment forms and two people emailing comments, totaling 6 specific comments. The majority of comments were about access.

Table 6: Lakewood Comment Summary

Comment Topic	Number of Comments Received on Topic
Access	3
Schedule / Service	1
Miscellaneous	2

Communications/Event Promotion | Sound Transit/URS Open House Events

Sound Transit instituted a variety of communications vehicles to reach a wide audience of riders and stakeholders about the public open house events. Outlined below are the communications vehicles that were used. Samples are included in Attachment 2 at the end of this appendix.

Media

- Press release distributed to print and online publications in open house locations
- Press release posted on Sound Transit's Website

Direct Mail

- Postcards mailed to recipients in each of the location zip codes

Direct Rider Outreach

- Postcards at stations and on-board trains
- On-board rider announcements
- E-mail rider alert sent Thursday, January 20 to 6,173 recipients

Advertisements

Newspaper	Date
Kent Reporter	Friday, 1/14/11 Friday, 1/21/11
Auburn Reporter	Thursday, 1/20/11 Thursday, 1/27/11
Bonnie Lake Sumner Courier-Herald	Tuesday, 1/4/11 Tuesday, 1/11/11
Puyallup Herald	Wednesday, 1/12/11 Wednesday 1/19/11
Tacoma Weekly	Friday, 1/14/11
Tacoma News Tribune	Saturday, 1/15/11 Sunday, 1/6/11
Lakewood Observer	Week of 1/14/11

Detailed Summary of Comments by Station

Kent Public Open House | Kent Senior Activity Center

Date: Wednesday, January 26, 2011
Location: Kent Senior Activity Center
Attendance: 38
Comment Forms: 18

Access

- The future Highline-Midway station will need access across I-5 at 240th. I will encourage usage by the West Hill neighborhood and allow walkers to take the light rail.
- No shuttle for everyone along platform, need traffic cops when train arrives – backup on lights
- The traffic is horrible. I’ve requested from the city for there to be traffic cops and I was told there is no problem. The train arrives at Kent at 4:39 and it can take until 5 just to get to Central. That is ridiculous! A skybridge or traffic cop is needed there.
- The crossing signal at Smith Street seems to have constant problems – it takes a long time for it to stop after Sounder leaves. Something to report to Burlington Northern
- See packet of suggestions (*attached at the end of this section, beginning on pg. 13*)
- The signals at Smith St. and Second Ave don’t detect bikes very well. There should be a traffic light with good detectors at Smith St. and Railroad Ave. The bike lanes on James St should be extended to the East at least to Central Ave. In Auburn, cyclists cannot trip the lights on A St NW and A ST SW to cross Main St. Cyclists on Main St cannot trip the lights at C St. At the Tukwila station it is very important to maintain the connection to the North and East to Renton. Currently Longacres drive is used but I don’t know if that road will continue to exist.
- At the future Midway station it will need a 240th bridge over I-5 to connect West Hill neighborhood for walking or driving.
- Provide signal at Railroad Ave and Smith St
- Provide better crossing of tracks at each end of the platform, such as more of a shoulder for bicycles (north side of Smith St and on James St)

- Provide better signal trip at Smith and 2nd Ave for bicycles, especially in the northbound direction (for example an “X” or “T” marker/symbol in the pavement for cyclists to put their crank over to activate the signal)
- Extend bike lanes eastbound James St just west of 1st Ave N to Railroad Ave N (understand that the cold storage building cannot move, but look at sidewalk and roadway)
- Provide bike lanes westbound James St from Interurban Train and under SR 167 to Washington
- Move the fire hydrant where we want to start bike lanes on James St (next to Kent Station development and the wide sidewalk area).
- Sharrows: eastbound on Pioneer from Railroad Ave then on right-of-way (now a dirt path between the parking lot), bridge over Mill Creek to Temperance St, turn onto Jason to cross Smith St at Jason/Titus.
- Provide sharrows: on Pioneer to State Ave to Gowe to 6th to Interurban Trail
- Provide crosswalk on Smith St at Railroad Ave – it is currently dangerous for pedestrians

Parking

- Not enough parking at Kent Station, lately the garage is always full in you’re not there by 8AM.
- Kent garage has no ownership – BAD driving, etc; vanpool drivers use regular parking spots instead of reserved ones. Why can’t commuters park on surface lots? We share garage with shoppers; large vehicles block view in garage – need special area
- Light Rail: Increased parking at Int’l Blvd. Station;
- Sounder: The main issue, although there are many, is the garage. I park @ Kent station and the garage is horrible. The design is too narrow and the change to one way from two way causes you to double back every other row. Oversize vehicles make it difficult to back out and to see, especially on the ramps. The garage is full before the last 2 trains come. It is full before 8AM. The garage is also not safe. My car has been hit 2x and I know of other accidents and break-ins. In addition, van pools park in regular spots but there are numerous van pool reserved spots.
- Trying to exit the parking garage in the evening is very challenging – you usually sit through several lights before making it to Smith St.; I only use this garage when Auburn garage becomes too full and hectic; I love riding the train but the parking becomes a rat race stressor. Willing to pay \$30/month for covered guaranteed parking spot

- Parking is limited.
- Congestions getting into garage in the morning can be time consuming. Granted it is usually closer you get to train time, but arriving can be aggressive when trying to find a parking spot. 2) Parking, at least for the 7:23AM NB train seems to be adequate (usually park on level 4 or 5) but later train have issues. I will park at Kent if Auburn station is full or if I know I cannot make it to the top of Auburn garage and back down again if garage is full. 3) It seems like parking has been more full over the last few months...maybe due to Russell moving from Tacoma to Seattle? This also effects the Auburn garage as well as the Sumner location not having adequate parking.
- Parking is the big issue for me. If you take the later morning Sounders, the lots and garage are full. Kent Station shopping center security threatens to tow your car. So there is not a lot of choices. This will be especially important if mid-day Sounders are added.
- Security – last month my vehicle was broken into and the station. Since then I have noticed signs of other cars being broken into just about every day. I have never seen a police or security officer patrolling the parking lots or garage. Video cameras need to be placed in the parking lots and garage.
- More parking! The lots and garage are full if you try to ride the late Sounders. I like the small park and ride lots around the station better than garage

Schedule / Service

- Not enough trains South-line each day. Need more in the morning and more in the evening. If you work downtown until 6 there is no train home. I am currently in the market to buy a home, but if the transportation isn't available I won't be able to live this far south, with my new work schedule.
- More trains midday-stuck downtown; coordinate buses @ King Street – 2 min late no buses won't wait
- Sounder: Daytime trains-10AM, 12PM, 2PM, RT-Tacoma to Everett and Everett to Tacoma
- Once you get downtown Seattle you are tapped. There are no trains in the middle of the day if you need to leave early. You also cannot stay late because there are no late trains. There is no coordination with the buses. Every morning while we wait at the crosswalk at King Street, buses just leave. If the train is late you can be left 10 plus minutes waiting for the next bus.
- Need more trains around the populate times (i.e. 5:12PM train); mornings extremely crowded between Kent and Tukwila

- As the sounder becomes more popular again (economic recovery, gas prices increase..) finding a seat becomes a challenge on some trains; Reminders to not have people put feet on the seats; Remind people to not place their bags on the seats to provide all available seat;
- I live in Seattle but work in Kent, at the Regional Justice Center. The last train that departs Seattle for Kent leaves at 6:50AM. That is not a convenient time. If just one more train left Seattle for Kent, maybe 1/2 an hour later, you would see a great increase in ridership. I know a lot of employees at the RJC who live in Seattle but drive to Kent, because the train leaves too early
- I have noticed signage encouraging light rail users to make use of the space for hanging bikes to store luggage. There is no virtue in encouraging this practice, even though it may be allowed, when many riders would keep their luggage with themselves anyway. The signs alerting cyclists that they may stand with their bikes are much smaller and not so easily noticed.
- The straps in place to hold bicycle wheels - front and back - on the trains, need to be replaced. They are too short, making it difficult to get around both wheels, especially if two bikes ride side by side. The strap buckle pass-through is too narrow, making it difficult to install. Last, the Velcro is well worn.

Station

- Need more Orca tappers- must backtrack when exiting train;
- Besides the garage, there is no shelter from the rain. There also need to be more tappers. Waiting in line to tap takes time and is horrible in the rain. Tapping on and off ONLY applies to the train. No other mode (busers) has to do this. This is discriminating.
- More locations to tap on and off using the ORCA card.
- Tukwila station: invest some money into station; it has slippery walkways. Not very much covered area for passengers waiting for train.
- The elevators for the pedestrian walk-over are terrible. They are always breaking down, or are vandalized by the kids that hang around. The police (city and transit) presence has fallen off in the evenings. This has resulted in a lot more large groups of kids hanging out and more “suspicious” activity happening in the alley behind the Chevron station at James and Central. I park in the lot there sometimes and I am nervous returning to my car in the evening. My number 2 issue is lack of shelter from the rain on the Sounder platform. The current shelters are too small and inadequate for the number of people waiting for the train. Most of us are there at least 10 min before the train arrives and 10 minutes in the pouring rain is not pleasant.

- Great work adding bike lockers!
- Shelters – it rains in Seattle. Cover the waiting areas of the train station.
- It would make a more comfortable commute if the platform were covered. The Kent platform is not only narrow but is mostly uncovered and when the rains fall (which is most of the year) everyone is either huddled under the two covers or just stand in the rain. The station includes benches along the platform but they are unusable most of the year when it rains. I would think a general cover along the entire platform would be more useful than the very artistic two covers that currently serve the Kent platform.

Communication

- Email notices come after the fact-too late.
- The email notices are too late. For example, for late trains 1/14-2/11 was sent on 1/21! Notices are usually sent over 30min afterwards- too late.

Route

- Train from Renton to Bellevue/Woodinville

Miscellaneous

- I enjoy riding the train when I do. It's clean, fast, and a pleasant way to travel.

Kent Transit Center – KBAB Suggestion #1 – Eastbound on James St – January 25, 2011

This suggestion is to provide bike lanes on the south side of James to support eastbound bicycle riders wanting to approach the transit center area to use the either buses or trains. An east bound bike lane on James Street is very badly needed from about 150' west of 1st Ave east to Railroad Ave. This needed bike lane starts where a fire hydrant and a street light are in the planter area and ends just east of the median in 1st Ave. There are several real estate parcels here: 1) Kent Station, 2) the transit parking lot, 3) the frozen food storage lot, 4) the BNSF RR crossing and 5) City of Kent street Right-of-Way. See the Kent Street Classification map below. The needed segment of Bike Lane is shown in black.

The existing segment of bike lane is shown in green.



Bike Lanes here allow the eastbound riders a safer way to use the right-of-way compared to when they are sharing the general purpose lanes with motor vehicles. Bike Lanes here provide eastbound connection from the Interurban trail, James St P&R, Regional Justice Center, Kent Commons, Kent Station, Kent Library and numerous businesses. Bike lanes on this segment of James St would complete the east end of the bike lanes on the south side of James.

JOHN R. NELLER
1300 EAGLE RIDGE DR. S #K-1071
RENTON WA 98055

I support this suggestion.

Name _____ Phone _____
Address _____ E-mail bikenstein@msa.com

Kent Transit Center – KBAB Suggestion #2 –Bike Lanes on James St – January 25, 2011

This suggestion expands the idea started in Suggestion #1. The big picture is to provide bike lanes on both sides of James from Washington Ave (W.Valley Hwy) to Central Ave. This creates the total connectivity needed for cycling across the valley floor from Central Ave to the Green River. Eastbound bicycle riders from housing and/or businesses are support in their need to approach the transit center area to use the either buses or trains. Westbound riders can come down from East Hill on James St and approach the Station using Central-Pioneer or through Kent Station via their north entrance and the road to the transit center. The needed segments of Bike Lanes are shown in black.

The existing segments of Bike lanes are shown in green.



The addition of these segments of bike Lanes to James St improves the safety of riders and gives then great connectivity. This connectivity is to businesses, public buildings, and transit services.

JOHN R. NELLER
1300 EAGLE RIDGE DR. S #K-1071
RENTON WA 98055

I support this suggestion.

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Address _____ E-mail bikenstein@msn.com

Kent Transit Center – KBAB Suggestion #3 – Eastbound to East Hill

Hill – January 25, 2011

This suggestion is to provide a connection to and from Kent East Hill. This suggestion avoids Central Av and Smith St (SR-516) because of heavy traffic and lack of bike lanes. This suggestion would have Sharrows on the road segments of this route.

This **eastbound** suggestion leaves the east side rail platform, goes east on Pioneer St (about 2 blks), turns right on State Ave (about ½ blk), turns left on a needs-to-be-paved trail right-of-way (easement?) south of the Mill Creek Middle School property (about ½ blk), jumps Mill creek on a footbridge and proceeds east on Temperance St (about 2 blks) and turns right on Jason Ave, the route proceeds south (1 blk) to the traffic light on Smith/Canyon/SR-516 where the route continues east using the bike lanes on the south side of Canyon Rd.

A **westbound** rider coming off of East Hill and approaching the station from the east could use the (above) eastbound route in reverse. However, the rider that comes down the hill at 20-30 mph could have a problems turning north onto Jason St. So the recommendation when westbound on Canyon is to cross Jason and turn right on State Ave, go to Pioneer St turn left and go west to the transit center.



Put Sharrows on Pioneer, State, Temperance and Jason (black).
Pave trail segment (dashed green). Existing Bike Lane (solid green).

I support this suggestion,

Name _____ Phone _____

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RENTON WA 98055

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Kent Transit Center – KBAB Suggestion #4 Sidewalk width on Smith St. – January 25, 2011

This suggestion addresses the reality that pedestrians and bicycle riders will walk east-west on the north side of Smith St to cross the railroad tracks. The sidewalk width on the north side of Smith from Railroad Ave to 1st Ave should be 8-12' in width to provide adequate space for people. The worst segment is from the west side of the BNSF RR to 1st Ave. The south side of the sidewalk needs to move back to the north about 5', since the traffic lane is warped badly here.

The sidewalk here needs to be moved north and made wider (red) and the width here is ok (green).

A safe route (yellow) for riders to use going westerly and southerly from the east platform, is to go south off the platform, go west across the tracks, turn north on 1st Ave, and take the first left into Kent Station, then continue south on 2nd Av using the traffic light to cross Smith St.

I support this suggestion.

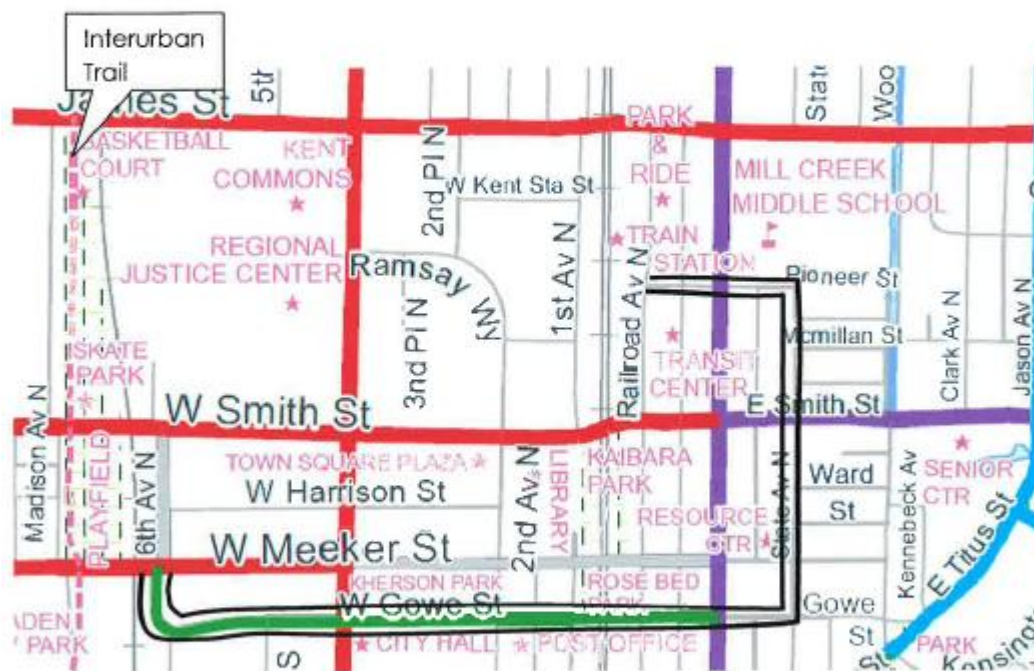
Name Thomas R. Hale Phone (253) 854-0734
Address 23327 115 PL SE E-mail
KENT WA 98031
STHALE2@COMCAST.NET

Kent Transit Center – KBAB Suggestion #5 – Installing

Sharrows – January 25, 2011

This suggestion is to provide: Sharrows in both directions on Pioneer (east from the Transit Center to State Ave), Sharrows on State Ave from Pioneer St to Gowe St, and Sharrows on Gowe St from State Av to 4th Ave (maybe 6th Ave).

Sharrows on these streets support access to the east hill route in suggestion #3, provide access to Scenic Hill via Gowe St, and provide access to City of Kent office buildings along Gowe St. This connectivity this provides is on streets with low traffic volumes and generally wider lanes.



I support this suggestion.

Name _____ Phone _____
Address _____ E-mail bikenstein@msn.com

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RENTON WA 98055

Kent Transit Center – KBAB Suggestion #6 - Traffic signal At Smith & RR Ave – January 25, 2011

This suggestion is to provide southbound access across Smith St at Railroad Av by installing a full traffic signal at this intersection. Southbound riders and pedestrians could cross here. South bound riders would not have to use the sidewalks along Smith to reach the crosswalks at Central Ave or 2nd Ave.



The desired location is shown with this symbol.



This idea has some convenience (ease of crossing Smith, and reasonable bike connections to the south) but also has some issues (stopping the eastbound cars on the train track).

JOHN R. NELLER
1300 EAGLE RIDGE DR. S #K-1071
RENTON WA 98055

I support this suggestion.

Name _____ Phone _____
Address _____ E-mail bikenstein@msn.com

Auburn Public Open House | Auburn City Hall

Date: Thursday, January 27, 2011
Location: Auburn City Hall
Attendance: 35
Comment Forms: 20

Parking

- Trying to find a parking spot in the morning is extremely stressful – drive all the way to the top to find out the garage is full – usually forced to drive to work then. I was paying Auburn f
- or a guaranteed spot in the garage - \$50/month. I thought it was a little expensive – willing to pay \$30/month. As soon as Auburn spots opened up the garage exceeded capacity within 3 days. This needs to be treated like a system. When Sumner doesn't provide parking those residents are forced to Auburn which puts Auburn at capacity and pushes Auburn people to Kent. Sumner needs to provide sufficient parking for their residents. Small park and ride lots with shuttle access would help, i.e. Lakeland Hills. I love riding the Sounder but the parking situation needs to be addressed. It is becoming very stressful and dangerous as people race to find spots in the morning.
- More parking – whether it be multiple level parking garage or adding to current garage (don't know if structurally this is possible); Parking attendant or electronic notification stating garage is full, rather than going to top floor only to find out all spots are full; Pave and line gravel lot for those who pay to park in this lot.
- Auburn desperately needs a 2nd commuter parking garage. Commuters are parking along the tracks and other parts of DT neglecting impacting parking for local businesses, residents and visitors (shoppers) in Auburn.
- We really need more parking at the Auburn parking garage that is free. I heard we were going to get another garage and now I hear we are not. How can people use the train if they cannot park their car? You are only doing half the task at hand.
- There is not enough parking! Overflow goes onto neighboring property that is being developed which creates negative impact on businesses whose parking is taken up by people who aren't visiting their locations. Please give Auburn what they need – improved parking with second garage.
- There is NOT currently enough parking. Right now commuters are parking in the empty building lots. Those will soon have construction going on and there will be no more “overflow” parking available. The citizens voted “Yes” with the premise and promise of a

2nd garage to be built with the money collected. Please respect the vote of the people and BUILD the 2nd garage.

- We will and soon need more parking. Let's start planning now!
- A second parking garage is needed in Auburn. It was understood that would be in ST-2. We pushed for its passage because of the promise of the garage. When you add more trains this need will grow.
- We serve 50-100 students a day at the Auburn station. It is great for the college and for economic development in the city. PARKING will be a huge issue for our students once the development around the Auburn station is complete (2-3 years). If our students cannot park in the surrounding area we will be forced to close programs that are vital to the Auburn community
- I am David Comstock, owner of Comstock's Binding and Bookshop. My main complaint is after years of promises Sound Transit has betrayed Auburn by refusing to build our 2nd parking garage except in the far distant future. However, you have greatly increased ridership while denying YOUR parking on our already stressed downtown. Your empty promises go back many years and many, many of us voted the last election to give you more funds and you made us promises to build our garage. Bellevue, which doesn't seem to really want light rail will get whatever they want, at whatever price, I venture. Fulfill your promises!
- With future development in Auburn another garage will benefit the overall transportation/parking in the downtown area.
- the Auburn parking facility is also full by early morning
- Additional parking will be required as well. The current parking garage is at capacity. If the construction allows for additional parking floors to be added, that should be considered now. If not, then an additional parking garage should be designed with future growth in mind (not only growth of current passenger capacity, but also growth of the population in the immediate future). The same 3 entities (City of Auburn, Sound Transit, and Metro Transit) should start negotiating now to determine the respective funding sources and percentages.
- Additional parking is needed.
- Need more parking and buses to get people to station so they don't need to park. Additional parking must be as close to the current station as the existing parking
- Parking IS a big problem in DT Auburn from existing commuters parking where they should not (on private property) and when they should not (outside of posted hours & in 2hr zones.) If you want increased ridership, you need parking. The current lack of parking turns away potential riders and causes current riders to violate private property.

- Free up stalls in the garage that the City of Auburn has taken. Would like to see second garage, have it on west side of tracks. Parking IS an issue!
- We NEED more parking in the garage that is free. You want people to use public transportation, but if there is no where to park it doesn't do any good.
- Downtown merchants are unhappy about parking (a) spill-over parking from sounder station, and (b) uncertainty and suspicion that parking problems will only be exacerbated by upcoming plans to re-develop downtown blocks near station (as the Comp Plan encourages).
- There's a consistent perception that a second parking garage was included in the ST2 funding measure.
- Perception than many Auburn station users are non-Auburn residents – need to fully document passenger survey and note/map station user's point of origin, by station.
- Recommendation to start charging current park-and-ride users to help pay for second parking structure.

Schedule / Service

- As the popularity increases, seating is becoming an issue on some trains.
- In regards to seating, have security or train conductors walk through cars reminding passengers to store backpacks, bags, etc under seat or in overhead; announcement is not enough due to passengers wearing headphones
- Have a car that allows dogs on leashes (owners should have to get pre-approval)
- Keep bus 497 from Lakeland Hills
- Please add a mid-day train.
- RTE 578 is a great addition. However, I suggest that inbound be routed over Safeco. Exit down 4th with a stop at King Street then proceed to University.
- It seems that the commuter rail services is quite successful, so much so that it is now capacity-constrained. The trains are "standing room only" NB from Auburn. If the commuter rail service is to improve and expand, additional cars will need to be added to the train (extensions of the boarding area will need to be made, or access to the additional seating capacity will need to be through an adjacent passenger car).
- More trains for special events (around the clock); 3) More trains in the evenings; 4) Add cars to accommodate more people per run – thus, expand loading area

- More runs to and from Seattle.
- Poorly-timed local bus transfers to commuter rail was reported by several.

Station

- On a positive note, the train staff, especially the woman in the morning with dark curly hair is extremely helpful at the Auburn station. She can help with anything and usually is helping new riders or those having difficulties with equipment i.e. kiosk;
- Additional ORCA readers should be placed at 2nd floor and bottom of stairway at parking garage to ease congestion when people get off train. This will provide more “tap off” locations.
- Have rider drop-off areas that don’t allow the driver to “park” until the rider’s train arrives, taking space that others need. 9) Secure bicycle storage is essential. Buses also need to be able to accommodate bikes quickly as people may ride a long way just to get to a bus (and/or put secure bike parking at key bus stops);

Access

- Work with local partners on better bicycle signage from Interurban train to transit center.
- Traffic- it needs to favor ridership trying to get to parking.

Communication

- Tell us how to petition the legislature to get (you) more funding (will contact transportation choices coalition. Tell us your criteria for re-assessing how existing \$\$ will be spent so we can provide info to you that is to the point.

Miscellaneous

- A number of employers reimburse employee transportation expenses, including driving. Get them on board for supporting public transportation.

Sumner Public Open House | Sumner High School

Date: Wednesday, January 19, 2011
Location: Sumner High School
Attendance: 26
Comment Forms: 21

Parking

- The most effective yet expensive solutions to both the safety and parking issues would be to add a parking garage across Traffic Ave with pedestrian walk-area. Having a parking garage would give commuters a close, safe place to park as well as easy access over Traffic Ave and access to either set of tracks.
- Please add more parking. I don't mind walking a ½ mile to the transit station. It would just be nice to have a safe place to park.
- Please add parking in Sumner.
- More parking or garage near Sumner Station; Permits for Sumner residents to park in restricted areas
- More parking is needed at Sumner.
- A garage just needs to be well designed to mitigate/minimize the large volume of the building and make it visually interesting.
- Sumner station needs parking and an overpass. A parking garage, perhaps with shops on the ground floor would be best. By the 3rd or 4th train, parking is very hard to find.
- A parking garage would be a nice addition.
- Biggest problem is lack of parking at Sounder Station in Sumner and parking lot across the street [State/Hunt] is NOT safe-dark and gravel/not paved lot makes it unsafe to walk. As a woman I don't feel safe using it. Let's get creative ideas to build a parking lot that complements the area-perhaps with lights and make it closer to the station.
- Acquire enough property to accommodate a parking garage between station LN and railroad track.
- I drive from Orting to catch the train in Sumner and always have to park several blocks away on the street. At least 50-100 more stalls are needed. Garage is the best option by far. As most riders are northbound, it should be in current location of parking lot to avoid most people having to cross Traffic Ave and tracks.

- Parking solution: Build a parking garage at or near Sumner tracks.
- Sound Transit parking lots are being used by more than just Sound Transit. Somehow there needs to be designated for ST commuters. Today at the first train home there were over 40 stalls empty- but were full in the morning. Construction workers were all catching a ride in company truck to work but parking in Sound Transit lot.
- Please add more parking. I am willing to walk ½ mile. Parking does not need to be close.
- Build a garage in location of main lot with at least 50-100 more stalls.

Schedule / Service

- Lastly, I would like to see more runs added. We have lived in Sumner for 5 ½ years and the only lines added have been beneficial to commuters. Especially in the summer, my family would use the Sounder a lot going to both Seattle and Tacoma. Please consider asking B.N for more time on the tracks. I think all cities that are connected by the Sounder would benefit greatly and it would also keep more people and cars off the road-better for parking in the cities and better for the environment!
- I would not mind taking Pierce Transit 408 if the schedules were more in sync. I take the 7.37am train and PT-408 arrives at 7:36am. It is too risky to take the bus because I could miss the train. Also when I come home, the 408 leaves a good 15 minutes after the train arrives. This is too much time wasted sitting in the Sound Transit parking lot. Please make the 408 route more useful by syncing up arrival and departure times with the Sounder train.
- Add one more train to leave Sumner around 9AM.
- Have a later train from Seattle to Tacoma- have time after work to shop, go out for a drink or dinner.
- Train and Bus communications: When trains are late, they need ability to notify buses that could wait.
- Also sync the ST-408 bus schedule with the train.

Station

- Please keep the station and improve it where it is. I bought my house in downtown Sumner because of its proximity to the station and consider it to be a huge asset. A garage would maybe work if designed extremely well.
- There needs to be a way people can know what side the train is on.

- Noticed occasionally on returned southbound trips the Sounder uses the Westbound tracks which seems “disjointed” for the passengers departing from the train. Those picking up passengers create a traffic issue on Traffic Ave.
- My husband has had to RUN many times when he’s been standing on the platform and the train is on the other track. It would also be nice to take advantage of the electronic signage that could be used to warn commuters ahead of time that there has been a change.
- Should be a bathroom/San-I-can so they don’t do it in the cabana.

Access

- Where the crossbar comes down is not a safe place to cross at the present time also. A parking garage with pedestrian cross areas would solve a lot of problems. There is currently no ADA access.
- Connecting the station to the trail along the Puyallup River would be great for walking and biking.

Route

- New stop where Sounder crosses Link Light Rail, near Boeing Access Road
- Would take the bus to station if service to Orting was provided.

Miscellaneous

- Maintenances should keep landscaping/weeding up better. Shouldn’t operate leaf blowers at 10:30 or 11:00 PM at night. When they pressure wash station sidewalks/facilities they shouldn’t let it run down storm drains (EPA wouldn’t approve), also should do it during days or on weekends.
- I am glad you came

Puyallup Public Open House | Puyallup City Hall

Date: Thursday, January 20, 2001
Location: Puyallup City Hall
Attendance: 26
Comment Forms: 32

Parking

- There is not nearly enough parking at the downtown train station- this discourages people from riding.
- Remote parking with shuttle bus is not effective – people want to park at the station.
- More parking needed at Puyallup station
- Try and get a refund from the WWF for Sound Transit’s share at the Red Lot. Purchase land (old oil company property or Eagles Club) demolish the structures for additional parking.
- More parking
- Parking garage! Red Lot-Improve usage. Dedicated shuttle, like airport parking
- Parking fills up at 5:47AM train
- There is a clear impact on long-term parking for the merchants. The original promises of NO impact on downtown (by John Hubbard) have never been kept. Puyallup needs multiple locations for merchant parking. This means going to permit (or zone) parking. One large parking structure in town is NOT the solution because of traffic. P.T.O.
- Do not want to see a parking garage. You need to offset people coming to this lot not try to bring more in. Puyallup and its residents are going away and becoming a parking lot and only a 6hr town.
- With expansion we need a park and ride south of tracks; parking garage should be closer to high school to move commuter traffic away from downtown; School district willing to explore shared use of parking garage.
- Think we need a parking garage but do need to be sensitive to the neighborhood.
- A parking building would be nice too!
- Parking-more!!! Need to salt/sand lot-slippery

- Buy old Puyallup oil property (for sale now) to extend parking
- More parking, more parking, more parking! Garage. Keep close tabs on real estate available close to station for parking
- Wish there was more easily accessible parking. Having to walk so far makes me less likely to ride. I ride the last train in the AM
- Sounder riders are parking on Main Ave, 3rd and 4th Streets even before the lot fills (because it is quicker to get out at the end of the day), Its dark, not enough parking lot lighting and often poorly time with day light savings time; A parking garage is not the answer
- Puyallup District may go to middle school program so 9th graders may move to the high school near the station; increase school population from ~1,600 to ~1,900+; Plans for expansion of parking in the area; Would like to talk to ST about a potential shared garage; Their parking study showed that Sounder riders park along Sector Ave between 5th and 7th Streets
- Need a garage
- 4th Ave is used as overflow parking
- Sounder riders park along tracks east of 3rd St NE all the way down to Dominos Pizza (along Spring Street?)
- If Puyallup riders will continue to have access to Cornforth offsite parking, it would be really great if the asphalt could be repaired and relined. I would be willing to park at the Red Gate lot, but with the addition of catching a bus, that increase my already lengthy commute by another half an hour. I have also heard complaints that the buses from the Red Lot are arriving too close to the departure of the trains now which makes it difficult for anyone who needs to purchase a ticket.
- I was on the steering committee for Puyallup when John Hubbard headed things up. The Promise he made was that downtown parking would not be affected. "If in the unlikely event that the parking lot becomes full then we will build a parking structure here" [pointing to the plans] Since then i have spoken to numerous representatives and to the City Council and about all i ever here is "we must do a study". Well 5 studies and surveys later the merchants downtown are still suffering. The commuters are mostly from out of town and don't really shop. I hope that between you and the Council you can find a win win situation for all.

Schedule / Service

- I'd like to take a bus but there is only one bus to the Puyallup station and it goes to Bellevue before going to Tukwila.

- I would like to see more trains- late morning, afternoon (early afternoon) and night
- Later trains needed.
- More train cars, more train runs
- Coordinate bus service with train
- Coordinate buses with Sounder trains departures and arrivals
- Have more trains and mid-day- BNSF conflict or have an express bus mimic train route when train can't run
- Reschedule trains with 1 earlier, and 2 later
- Still want us to get to all day Sounder service and weekend service
- More local bus service to train station. More Sounder service on nights and weekends. More local connector service from Puyallup to P&R-South Hill.
- More train cars, more train runs
- Mid day train.
- trying to figure out the schedules and cost was difficult
- The people most affected by this WILL NOT BE AT THE MEETINGS AS THEY WILL STILL BE ON THE BLOODY TRAINS AT 4PM???? Couldn't Sound Transit bother to do it from 7-9PM at selected locations or would that cramp their style? Government genius at its finest
- Puyallup express takes 1.5 hours from Seattle to Puyallup
- Dedicated connector bus in between Tukwila Station- TIB- Sea-Tac Airport during Sounder and Amtrak train times.
- Add food services also inside the train. Make it be almost like Amtrak.
- Seating on train getting tight. Overhead racks are too narrow so you cannot put your bags up there. Most people put bags on the other seat-takes up space [that could be used] for another person.
- Better Wi-Fi

Access

- Bridge/overpass from Stewart to station, crosswalk

- Bike lanes on 5th street SW
- Bridge over tracks for accessing train in the morning.
- No crosswalks are concerns for pedestrians crossing streets.
- We desperately need a crosswalk from the Sounder parking lot which crosses 5th St. SW to the corner of the block across from the Eagles building. Someone is going to be hit crossing at night. We also need a walkway from the other side for when we disembark on the opposite side of the tracks.
- Crosswalks by Eagles. Bridge/overpass for other side of tracks.
- SW corner of the 5th St. RR x-ing. Walkway tunnel UNDER tracks to connect E& W sides.
- Better shuttle service from the Red Lot and South Hill park and ride, Make it a continuous loop shuttle, Bridge or tunnel that goes above/below tracks at the station
- Provide concrete shuttle information for “Red Lot” – how long before the next train arrives, does the shuttle leave.
- For use of Red Lot, local bus connections, bike lockers area and lockers.
- People don’t use crosswalks and cut across Main Ave
- Need a crosswalk across 5th St NW at Sector Ave
- Need an overpass over the tracks because it is far to walk around to the other platform
- Need a crosswalk across W. Stewart at 2nd Street NW (or signal?)
- Pedestrian crossing across 5th Street SW to get from the main Sounder parking lot to the auxiliary lot is unmarked; a great improvement could be a cross walk on 5th Street SW just north of 3rd Ave NW.
- I ride my bike the station so I really appreciate the bike lockers on the platform. Thanks for those. If there are plans to build a multi-level parking lot at the Puyallup station, it would be important to me that easy access to bike lockers be preserved.
- I am wondering if there are plans for a pedestrian bridge or tunnel that could be used to cross the tracks. At the moment, crossing the tracks always requires a trek to one end of the platform or the other and then the crossing gates may be down. A means to cross the tracks in the middle of the platform would be very helpful. A bridge like the one in Kent would be nice, but an underpass/tunnel under the tracks would be even more convenient.

Station

- Coffee stand, Bathrooms, Indoor heated area, More Orca card readers
- Real-time next-bus info (more reliable service), to improve security-install cameras and enforce violations.
- coffee bar/indoor heated area, bathrooms, more readers at platform side
- It also would be nice to have another orca card station in Puyallup on the East end of the platform on both sides of tracks, on East end. Currently people in last car have to double back to tap card before going to offsite parking. So an additional tap station in East end of platform would be great. Beautiful.
- Train station is less than 50% Sounder users the rest are post office, police, fire, school district employees and students. Lots have skateboarders, drug use, and unattended areas.
- It is impossible to know on which side of the two tracks to board going to Seattle. There was a wealth of information on the bus schedules, which does nothing for the Sounder riders. There is a very small sign down low on one of the track sides, that gives some limited information.
- I would like to (again and again and again) request tagging machines on both sides at the far north end of the station. As at least half of the Puyallup riders pass the north end of the station every day, it would seem to make sense to have the machines handy instead of expecting riders to go out of their way to tag especially when the train disembarks riders on the right side (wrong side) in the evening.
- The ideal solution would be to close the Puyallup and Sumner station and build a new super-station near Shaw Road, half way between Puyallup and Sumner.
- We could like to see a Sounder Transit go from South Hill, Puyallup to McChord AFB or Fort Lewis. We live in a HUGE community of Military and traffic is horrible going down 176th to get to the bases. We would like to see an easier way to get to work w/o stress of traffic.
- That is at least worth of discussion is the idea of a station between Sumner and Puyallup
- A great idea in the wrong place, more between Sumner and Puyallup.
- I have ridden the train from Puyallup for 7 years. I live in downtown and would like the station moved to in between Sumner and Puyallup to provide better parking, quick access to freeways, space for parking without ugly and expensive garages, enough space for covered queues; the large majority of riders drive or speed through Puyallup to get home to South Hill, Orting, Parkland, Spanaway. They can all get home quicker with

close freeway access. Envision the East Pierce county Regional Transit Center, 2 minutes to 410, 167, 512, serving train riders from Sumner, Puyallup, Bonney Lake, Buckley, Orting, Graham, Spanaway and conveniently located at Shaw and Pioneer.

- Give up on downtown sites in Sumner and Puyallup and build large transit center at Shaw road. Make the cities “buy their mistakes” from ST. Cities were the ones who wanted stations downtown and learned they were wrong.

Communication

- Would like to see more communication of the vision of development. Mixed use development is favorable. Some concerns of pedestrian crossings on Stewart; lighting and crossing.
- I believe you would benefit from improved interface with commuters and residents
- Provide advanced warning when train is going to locate on other tracks

Ticketing

- Round trip Puyallup-Seattle used to be a day pass. It is still advertised that way at the ticket vending machine but not accepted in Seattle buses. It should be an option to buy a “real” day pass ticket.
- Buy tickets on the train

Miscellaneous

- Publicity at Farmers market, Fair, etc
- Concerns for neighbors are contamination on lot, security during and after hours, pets dying due to commuters. Garbage in yards, lawns and yards being cut through. Would like to see no one air blowing lot at 2AM. Driveways blocked off daily at our houses.
- Encourage better overhead coverage on walk routes- businesses on Meridian (awnings) for rain protection.
- At last week’s “Sounder Parking Open House” held at city hall, council member John Knutsen stated than he had conducted a study to evaluate the residential locations of those who parked at the leased Sounder parking lot (Cornforth-Campbell) in downtown Puyallup. He elaborated that he had the Puyallup Police Department run a check on every car parked there. This check went as far as identifying which cars were registered to owners residing inside and outside Puyallup city limits. At a minimum, I find this to be a misuse of valuable police time. Also, what other checks are the police running on the owners, open warrants, unpaid traffic tickets etc that commuters are not aware of ? The question is, who authorized this action at city hall or was it a rogue activity at the behest

of one of two council members with personal financial interest? Either way, to conduct this kind of covert operation against an assumed level of privacy of Sounder Train commuters expect is simply disgusting.

Tacoma Public Open House | University of Washington, Tacoma

Date: Tuesday, January 18, 2011
Location: University of Washington, Tacoma
Attendance: 28
Comment Forms: 18

Access

Tacoma Dome and South Tacoma Stations:

- Simple solutions such as crosswalks surrounding this on Puyallup, bike-ped way finding and bike connections to regional facilities such as the water ditch trail South Tacoma
- Crosswalks at all surrounding intersections within ½ mile would help. Connect bike trails, existing and planned-see the Mobility Master Plan for how these needs could help each other out.
- Provide way finding signage near station that describes distance to local amenities or destinations by minutes and miles (e.g. car museum, waterfront, Downtown Tacoma, etc.)
- Supportive of providing better access for pedestrians and bike riders to the Sounder station; better and more bike paths, bike racks or lockers, wider sidewalks, etc.
- Providing residential around stations allows people to walk to transit to commute to Seattle and other towns along the way
- Sound Transit should help Tacoma implement their Mobility Plan, extending bike routes, etc. and encouraging them to keep them clean of gravel and litter.

Tacoma Dome Station:

- Bicycle connection for E. 23rd to existing N/S Tacoma Dome station bike lane
- Tacoma Dome Station: Bike lanes on D St. should extend beyond I-5 bridge south, up McKinley to S. 38th. Likewise, bike lanes on L Street over I-5 to S. 38th. This gives riders smooth access from downtown via Hood Street overpass of Foss Waterway.
- Pedestrian safe connections (crosswalk, lighting, etc) for Puyallup Ave, East D & Puyallup Ave at Tacoma Dome station.
- For bikes, try to connect “existing” trail along Dock to Stadium with Schuster Parkway “existing” trail. The current crossing on the sidewalk is rather awkward.

- Provide better lighting for crossing E 25th Street from the station
- Look at adding bike lanes on Puyallup Ave
- Sound Transit should extend Tacoma Link to the Stadium District to provide a connection to regional transit for those who live in the north Tacoma neighborhoods, many of whom now drive to Tacoma Dome Station.

South Tacoma Station:

- Bike lane continuation of bike trail on 58th E/W to Tyler; continuation N/S of Water Ditch Trail 60th to 56th
- Bike lanes of improved sidewalks should be installed on S. 56th between Puget Sound and Tyler. Even better, between City Water Ditch trail and Tyler.
- The new South Tacoma station needs better bike access
- I strongly urge developing a good bicycle connection between the Water Ditch Trail and the South Tacoma station. Either with good bike lanes or preferably, a dedicated trail or bikeway. A good connection from the station to Tyler Street-a bike path or bike lanes-would make the N/S bike-lane corridor from Stevens to Tyler much more functional. Access from N. Downtown: complete bike lanes on Dock Street & E. 23rd street to D. Street. From West: Improve S. 25th street to accept riders from Hilltop & UWT, using bike lanes. Future Prairie Line trail will intersect.
- Pedestrian safe connections (crosswalk & lighting) for S. Tacoma Way, S. Washington & S. 56th at S. Tacoma Station.
- A multi-use trail (ped/bike) on S. 58th between the Water Ditch Trail & the Station would do a nice job of funneling bike & ped traffic from east of the trails. Because the South End of the Water Ditch trail is slated for completion by the end of 2011, S. 58th will actually pull/funnel peds & bike from North and South of the S. 58th/Water Ditch Trail connection.
- New bike cones on S. Tyler could bring riders from U.P. and West Tacoma but because S. 56th is a virtual 5-lane freeway, these riders will be forced to either ride the sidewalks or frustrate very impatient drivers. Extend S. 58th street multi-use trail west to S. Tyler thru green belt.
- All intersections on S. Tacoma Way between S. 47th and S. 66th should have pavement cross-hatching; and of course ADA ramps. S. 56th St. intersections from S. Orchard to at last Pine St. deserves similar attention.
- Bike lanes on S. 54th from S. Washington (see above) east to Tacoma Mall blvd.

- Provide W/E access to S. Tacoma Station: a. develop trail on S. 58th St from Tyler to Durango (metro Parks prop)
- For better bicycle access (S. 56th Station): improvements needs to be made to S. 56th since that is one of the better streets for crossing I-5. Improvements to S. Tacoma Way and/or Delvin from Pacific St. since it is the easiest hill to climb for bicyclists.
- Crosswalk at all intersections on South Tacoma Way from S. 47th to S. 64th, also S. Orchard to S. Oakes, S. Washington north of 56th needs improvements.
- Bike lanes on S. 54th from S. State to S. Washington & S. Washington to Station. Bike lanes-South Tacoma Way to S. 38th and 56th.
- Connect Water Ditch Trail to Sounder Link with way finder signs. Promote walk/bike.
- Connect Water Ditch Trail to station via 58th Street
- Connect Tyler Street bicycle improvements to station via the north end of the community center property (approximately the 58th Street right-of-way)
- There are a lot of north-south bicycle and pedestrian improvements in South Tacoma but not many east-west connections; they are working on this
- Could we have an all-stop at 60th Street and Adams Street

Parking

Tacoma Dome and South Tacoma Stations:

- We don't need more parking garages in our community. There will never be enough free parking. ST should look at managing parking with charging for spots instead of building more free parking.

Tacoma Dome Station:

- Increase parking at TDS to maximize link/bus use to downtown & UWT
- Charge for parking at Tacoma Dome station so legit commuters use it instead of UWT students.
- Also perpendicular parking changed to back-in diagonal.
- Parking lot is getting full

Schedule / Service

- The feeder lines to the stations-like the link & buses-should be extended to more crowded urban centers. Link should go to the Stadium District & to the Emerald Queen stop.
- More trains to Sounder soccer games! And publicize it, many fans don't know the train is running.
- It would be great if Sounder ran during the day and on weekends. Maybe in the future dedicated track?
- Provide bus connections at station

Station

Tacoma Dome and South Tacoma Stations:

- Covered bike storage is critical; suggest use of portable shipping containers.
- Make sure bike racks are available and more room on Sounder for bikes.

Tacoma Dome Station:

- Consider rearranging bus/train/link terminals for easy transfers and safety.

Miscellaneous

Tacoma Dome and South Tacoma Stations:

- Housing-mixed income housing should be encouraged near the stations. We need public support-governmental support of this goal- not simply assume that "the market" will direct the actions of development.
- More density of people living around transit stations is needed to alleviate the need for acres of parking
- The best thing Sound Transit could do would be to help the neighborhoods with a station to develop land around the station as mixed use. Sound Transit does not have to be the developer but needs to provide incentives to developers and/or find the developer to build near the station.
- Public/private partnerships might work where housing/office/ and parking structure could all be in one building.
- Sound Transit and the City would realize a savings in the long run if the transit riding public could live at or near the station and have no reason to drive to the station

Tacoma Dome Station:

- I am interested in your plans for allowing vendors in your stations. I'm the owner of Jeff's Ice Cream in Tacoma and I sell made in WA novelty Ice Cream treats and good humor products and would like to talk to someone about a vendor spot for summer 2011 at the Freight House Station. Facebook: Jeff's Ice Cream; jeffsicecream@gmail.com; 253-606-0252.

South Tacoma Station:

- Communication with Metro Parks to bring people to transit and new community center. Community center opens 3/12.

March 2, 2011

Valerie Batey, Project Manager
Sound Transit
401 S. Jackson Street
Seattle, WA 98104
val.batey@soundtransit.org

Ms. Batey:

The Tacoma Bike and Pedestrian Action Committee (BPAC) is a group of 16 cycling, pedestrian and transit advocates authorized by the City of Tacoma to provide citizen oversight of its efforts to implement the Tacoma Mobility Master Plan (MoMaP). MoMaP is an ambitious 15 year plan that will create a City-wide bicycle network, significantly improve Tacoma's pedestrian infrastructure and integrate both systems with mass transit. MoMaP was unanimously adopted by Tacoma City Council in June 2010. Despite the sluggish local economy, the City has allocated approximately \$1 million toward MoMaP implementation expenses for the 2011-12 biennium.

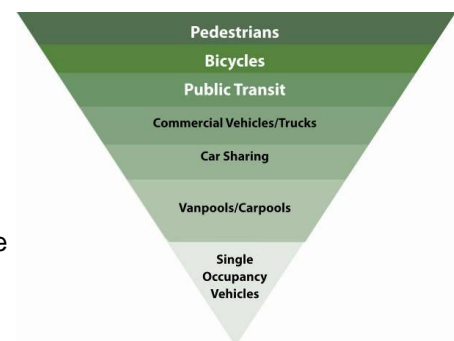
Attached you will find a narrative outlining BPAC's recommendations for bicycle and pedestrian infrastructure improvements near the Tacoma Dome Station and the 56th Street Station. (Maps outlining recommendations are available upon request). After many hours of careful field research, prudent study of MoMaP and vibrant discussion resulting in a strong consensus, we believe these recommendations are low cost solutions that can be implemented faster, more cheaply and with a smaller environmental footprint than new parking facilities. Furthermore, Sound Transit's support of local alternative transportation choices rather than automobile use by Sounder riders would be consistent with the transportation priorities adopted by the Tacoma City Council. BPAC believes these infrastructure improvements would help maximize Sounder ridership by Tacoma residents in the near term if implemented prior to or shortly after the expansion of Sounder service.

Finally, BPAC wishes to thank Sound Transit for its interest in obtaining local citizen input to maximize customer use of active transportation modes. Tacoma's Climate Action Plan is consistent with these recommendations and speaks to a growing regional commitment to climate change mitigation. Please feel free to contact us if you have any questions.

Sincerely,

Diane Wiatr, City of Tacoma Mobility Coordinator
dwiatr@cityoftacoma.org 253-591-5380

Ken Peachey, Chair, Tacoma Bike and Pedestrian Action Committee
ken.peachey@gmail.com



Green Transportation Hierarchy

Passed by the Tacoma City Council June 2010

March 2, 2011

Tacoma Dome Station Bicycle and Pedestrian Improvement Recommendations from the City of Tacoma's Bicycle and Pedestrian Action Committee

Bike Parking and Security

- Signed, high resolution cameras pointed at the bike racks
- Retain existing lockers and add a bike cage to prevent theft/vandalism on bikes, daily and monthly rental fee for access, include security cameras and signage warning "Rack is under surveillance". Bike lockers should be actively managed, ensuring they are actively used rather than "committed" but seldom used. Perhaps management might be sub-contracted to a private contractor.
- Add more bike racks

Pedestrian Improvements

There are numerous intersections within a two block radius of the station that do not have painted crosswalks and a few that are missing curb ramps. At some intersections there is fading red paint suggesting a crosswalk, and even those warrant white paint because the red is invisible to drivers.

Intersections needing crosswalk paint and stop bars:

- E. 26th and D St.
- E. 26th and C St. (curb ramps missing as well)
- E. 25th and C St.
- Puyallup and C St. (with a ped island in the median)
- Puyallup and D St. (particularly hazardous area)
- Puyallup and E St.
- Puyallup and F St. (exit for bus transit)
- Puyallup and G St.
- G St. and E. 25th
- 25th opposite the Bus Shop ramps are nice but there should be a mid-block crosswalk as well as paint on the roadway indicating to drivers to slow for pedestrians.
- 25th at the Sounder Exit from Freighthouse Square. Perhaps some criss-cross markings at the

Other Pedestrian Improvements:

Sidewalk on the east side of C St. between Puyallup and 25th needs repair (there are also driveway issues)

Bike Access

1. S. 25th Street, Pacific Avenue and Puyallup Avenue

From the west and north (Hilltop area and downtown) and **from the east** (Fife), a **cycle track** on the south side of Puyallup Avenue would provide the safest bicycle travel. Either a cycle track or **bike lanes** will require revision of bump-outs at intersections to allow for appropriate lane width. Sharrows should not be considered as a viable alternative on Puyallup Avenue. However, downhill (east-bound) **sharrows** could be installed on S. 25th from MLK to Pacific Avenue (connection to Scott Pierson Trail along I-16, intersection with future Fawcett Bike Boulevard and G Street bike lanes, Water Ditch Trail and Prairie Line Trail). At the intersection of S 25th Street and Pacific Avenue, because crossing the light rail tracks is dangerous, we recommend:

- Bike lanes on Pacific Avenue from the planned new bridge over I-5 (WSDOT HOV lane project), under the new Sounder Overpass to Puyallup Avenue, then on Puyallup Avenue from Pacific Avenue to Portland Avenue. Signage and/or lane markings on S. 25th and Pacific Avenue should direct bike traffic to cross light rail tracks perpendicularly

Bike network connection note: A portion of S. 25th Street between the Scott Pierson Multi-Use Trail along I-16 and S. Sheridan Street, Puyallup Avenue, the Fawcett Avenue Bike Blvd and the future Water Ditch and Prairie Line Multi-use Trails are all part of the Tacoma's Short Term Bicycle Plan (page T-20 Transportation Element City of Tacoma Comprehensive Plan); all are corridors that will most certainly be used by Sounder commuters. The Waterditch and Prairie Line Multi-Use Trails will meet at South Tacoma Way and South C Street, an intersection that has benefited from much attention during the joint planning process by the City of Tacoma and Sound Transit. Maximizing bike safety at the intersection of the Waterditch Trail with S. C Street as well as the Prairie Line Trail intersection with S. 25th Street will be critical.

Bike Lane: Be sure to make the "D" St. connection between 26th and 25th. There's just a one block gap in the bike lanes in this area.

2. McKinley Avenue

From the south, bike lanes on McKinley Ave from S. 38th Street to the I-5 overpass. This infrastructure is included in MoMaP's Medium Term Bike Plan, and extends the existing bike lanes on D Street past the Tacoma Dome and will ease bike access to the Station from heavily populated residential regions immediately south of I-5.

3. Dock Street

From the north, bike lanes preferably or **sharrows** on Dock Street between Schuster Parkway and D Street would offer connection to the downtown core, Old Town, the Ruston Way multi-use trail, Tacoma's populous North End and Point Defiance

56th Street Station

Bike Parking and Security

- Signed, high resolution cameras pointed at the bike racks and bike lockers
- A bike cage to prevent theft/vandalism on bikes, daily and monthly rental fee for access, include security cameras and signage warning "Rack is under surveillance". Bike lockers should be actively managed, ensuring they are actively used rather than "committed" but seldom used. Management might be sub-contracted to a private contractor

Pedestrian Access

Sidewalks on S. Washington north of S. 56th are in poor repair or non-existent on the west side, non-existent on both sides of S. Washington between S. 56th and S. 58th Streets. This 2 block stretch of S. Washington currently utilizes perpendicular parking south of S. 56th, which might be changed to back-in diagonal for increased visibility of cycle traffic

Crosswalks at all intersections on South Tacoma Way from S. 47th to S. 64th should incorporate highly visible pavement treatment and ADA compliance if it does not already exist. Crosswalks on S. 56th should get similar attention from S. Orchard to S. Oakes.

Provide ADA ramps from South Tacoma Way to Tyler Street along South 56th Street. There are 5 to 10 missing ramps. With new ramps, a person could travel from Tacoma Mall Boulevard to University Place using the sidewalk on the busy arterial road.

SERA, SOUTH TACOMA COMMUNITY CAMPUS: Create a trail that cuts across Metro Park property at Sera Park. We can imagine a future where the trails could be extended thru the Grey Middle School grounds to access South Tyler Street.

On South 66th Street just on the northerly side of the future parking lot for the Community Center, there may be a need to connect the path to South 66th Street's existing sidewalk.

Bike Access

1. S. Adams to S. Tyler Multi-Use Trail

A multi-use trail from the vicinity of the Sound Transit parking lot on S. Adams across Metropolitan Park District land to S. Tyler Street has the potential to complete an east-west connection between the bike lanes on S. Tyler and the Water Ditch Trail (see #2 below; the south end of the Water Ditch Trail is on Public Works work schedule for completion by the end of 2011). Development of this multi-use trail would obviate the need to develop S. 56th Street for bike traffic between South Tacoma Way and S. Tyler Street

2. S. 58th Street

From the east, a multi-use trail on S. 58th Street from the Water Ditch Trail to the Station. The crossing of South Tacoma Way is facilitated by an existing traffic light, where loop detectors could be installed. Please note: The Steering Committee which together with City staff and professional consultants understood that development of this infrastructure was already committed as part of the 56th Street Station construction project; otherwise the Steering Committee would most certainly have included this project in its Short Term Bike Project Priority List (see numerous maps already produced by the City)

3. S. Washington Street

From the north, bike lanes on S. Washington Street from South Tacoma Way and S. 38th. The road is wide, amenable to immediate treatment and connects to bike lanes on S. Tacoma Way that end at S. 38th Street

4. S. Tyler Avenue

Add **bike lanes** on S. Tyler from S 56th to S. 62nd. This is the only section of S. Tyler between Center Street and S. 74th that does not have lanes.

Lakewood Public Open House | Lakewood Boys and Girls Club

Date: Tuesday, January 25, 2011
Location: Lakewood Boys and Girls Club
Attendance: 19
Comment Forms: 5

Access

- Connect city across the tracks is crucial to fulfillment of the Lakewood comprehensive plan (redevelopment and densification of station-area housing) and local Pierce Transit connection with the Lakewood transit center @ Lakewood Towne Center. We've designed an entire zoning district around the station and hope to better integrate it with the community
- Please emphasize train safety and cost vs. equal traffic volume for cars. Economic impact of greater efficiency of trains moving product on old lines. Increase of product movement equals more jobs.
- Dedicated bike lane on Pacific are very nice, not getting much use due to the more dangerous nature of the other roads a biker rider will have to travel to get to Pacific. I'm concerned that over time the Lakewood Station will get more congested and grid locked than Puyallup. Now is the time for Sound Transit and Lakewood to consider purchasing rights to land across the street for future expansion. Puyallup lost these options years ago, Lakewood might still have a chance.

Schedule / Service

- Hours of travel are limiting; more frequent service

Miscellaneous

- I've noticed within the last couple months that I now hear the base play Taps at 10pm. When I moved into this house in 2004, I was only aware of the 4:30 pm Taps. I'm sure you can imagine my surprise when I noticed they were playing it twice daily. From what I have been able to track down, they have always played it at 10pm since I moved in, I just never heard it before. I think the second playing of Taps is now available for my listening pleasure because of the work that has been done along the train tracks. Specifically, the brush that used to occupy the corridor. I would like to know if there is going to be any noise remediation done to reduce noise. Taps twice a day isn't bad. What I am worried about is when the Lakewood station becomes the end of the line and the trains are stored in the area overnight - running.

- Why are Seattle and Tukwilla not on the list? (for public meetings). Since Tukwila Sounder station looks like it's close to breaking ground this is a good time to integrate issues of Bike access into the new station. With the Interurban trail only 1/4 mile away it's a pretty good place to get it right. The Boeing corporate trails also hub out from this location. The painful park of Tukwilla and Renton is the rest of the story. Go North toward Renton Airport and the Boeing complex and you take a dangerous bike ride. Getting from Tukwilla Sounder over to Tukwilla Light Rail is also no fun as is South Center Mall and other close but hard to get to locations like SEATAC.

Tukwila | No Public Open House Event

Email Comment: 1

Miscellaneous

- As a South Sound rider I received the recent information email about the open houses for public comment on Sounder Station Access Study. I noticed the Tukwila station area was omitted. I presume that omission was because our station is temporary and is due to be overhauled to a permanent, new station. I see from the Tukwila Station webpage that the plans for the new construction were to be approved this last November. Is there a construction start date yet? The ridership at the Tukwila Station continues to increase, and with it the problem of overcrowding in our parking facility. It would be nice to know there is a light at the end of the tunnel in order to put up with the problematic parking.

Attachment 1
Comments – Pierce Transit



March 10, 2011

Val Batey, Senior Planner
Sound Transit
401 S Jackson Street
Seattle WA 98104-2826

RE: SOUND TRANSIT STATION ACCESS STUDY COMMENTS

Thank you for the opportunity to participate at Sound Transit's recent series of Sounder Station Access Study open houses. Pierce Transit is providing the enclosed list of potential projects for consideration as you develop the best strategies for improving access to each of the Sound Transit stations. Our comments relate to the stations located in the Pierce County Subarea and provide a mix of necessary transit improvements to promote transit access and/or transit speed and reliability improvements, as well as general comments for improved multimodal access to the various stations.

Unfortunately, with the recent failure of Proposition 1 in Pierce County, at this time Pierce Transit will not be able to implement the Preservation Plan to maintain existing service levels in Pierce County. The Pierce Transit Board of Commissioners met at a special study session on February 28, 2011 and directed staff to go forward with the Reduction Plan to eliminate 35% of today's transit service by October 2011.

The comments and suggested projects on the attached **Pierce Transit Recommendations for Sound Transit Station Access Study** continue to be necessary with the Reduction Plan. The comments are organized by station location. While all the potential projects are worthy suggestions for consideration, the most critical projects that will support local Pierce Transit services providing connections and access to the stations are highlighted in yellow. An example is item #1, the bus zone and queue jump improvements along Pacific Avenue and 112th Street. These transit stop improvements provide for local access and connections to Tacoma Dome Station as well as Lakewood Station and the South Hill area. A number of the projects that have been identified provide for improved access and egress for transit coaches at stations; Sumner Station access project #7 and Puyallup Station access project #15 are two such examples.

Please don't hesitate to contact me if you have questions regarding any of the items on this proposed list. As you move forward developing the Access Study project list, we look forward to meeting with Sound Transit staff to share additional information about projects on this list and to learn about the comments and information gathered during at the recent open houses.

Val Batey, Senior Planner
March 10, 2011
Page 2 of 4

Please contact Janine Robinson at 253-984-8156 or jarobinson@piercetransit.org in order to schedule a meeting to further discuss these potential projects.



Tina Lee
Principal Planner

TL

c: Lynne Griffith, CEO
Kelly Hayden, Acting VP, Transportation Services
Jessyn Farrell, Interim Public Relations Officer
JoAnn Boring, Principal Planner
Janine Robinson, Senior Planner

Pierce Transit Recommendations for Sound Transit Station Access Study

Tacoma Dome Station

1. Bus zone and queue jump improvements to benefit transit speed and reliability for services providing connections to Tacoma Dome Station. Primary location is at Pacific Avenue/SR-7 at 112th; preliminary design and estimates are available. This project is one of Pierce Transit's highest priorities for implementation as identified with the Reduction Plan and is also needed with future expansion. (Pierce Transit has conceptual plans available for review.)
2. Transit bus bay expansion on G Street adjacent to the Tacoma Dome Station facility for passenger boarding areas and bus layover zones. PT will provide a feasibility study from our System Redesign effort with summary information. With the failure of Proposition 1 on February 8, this expansion is not as vital. However, if the Pierce Transit Board elects to seek additional funding and implement the key features of the Preservation Plan in the future, this expansion of bus zones will be needed to accommodate vehicles, especially in the peak hours.
3. Installation of pay for parking infrastructure at the Tacoma Dome Station facility to manage parking utilization for transit commuters.
4. Install improved active real time parking availability signage at garage accesses to notify users of parking availability (similar to airport parking garages).
5. Partnership project with Pierce Transit owned Air Spares property – Transit-Oriented Development (TOD) opportunities that could include mixed-use development, parking and transit infrastructure to support transit service at this major hub. This access project could be preliminary design and environmental phases to enable Pierce Transit to seek construction and implementation opportunities in the future.

Lakewood Station

6. Pierce Transit supports the Lakewood Connection project to develop a pedestrian bridge or at grade crossing to the west side of the rail road tracks to connect the Lakewood Station to Kendrick Street. This connection must be designed so that it does not preclude a future bus connection to this access point at a later date. The site does not currently have local transit service, however with future zoning improvements and higher densities proposed by the City of Lakewood, transit service could be provided to this location to support connections and economic development.

Sumner Station

7. Route 496 egress from the station improvements for priority transit access to the Sumner Station. Pierce Transit buses operating the Route 496 connector service from the Bonney Lake Park & Ride experience difficulty leaving the station. Priority lanes for transit would alleviate these access issues.
8. Improve transit access opportunities with a correction that currently prohibits buses travelling northbound from making the left turn on to Maple Street to cross the railroad tracks. Currently there is a visual obstruction from the rail control box that prohibits the ability to route buses along this path. Include an element in the project to address this issue and relocate the rail control box.

South Tacoma Station

9. Implement a comprehensive pedestrian connection project providing for full mobility connections to the South Tacoma Station. Pierce Transit staff regularly attend South Tacoma Neighborhood Association meetings and the local community has repeatedly requested these improvements. Key connections to adjacent local transit stops include sidewalk installation from the south side of the station on 60th Street to South Tacoma Way.
10. Installation of improved bus stop zones at the two bus stops on S 56th Street adjacent to the South Tacoma Station (PT stops #2701/#2695) with shelters and pedestrian amenities to provide for future local connections.
11. To provide for adequate feeder bus service from the City of University Place to the South Tacoma Station, provide Sound Transit feeder bus service and associated improvements from the new University Place Town Center park & ride facility to the South Tacoma Station.
12. Identify, design and implement transit signal priority (TSP) and/or lane improvements that would benefit connections from the new University Place park & ride facility to the South Tacoma Station.
13. Multimodal bike connections and bike lane enhancements from University Place to the Sound Transit South Tacoma Station.

Puyallup Station

14. Access and egress improvements to the Puyallup Station for a more direct route for buses travelling along W Pioneer Avenue to the station. Buses are not able to make the turn from Pioneer Avenue to 5th Street to reach Stewart Avenue for access to the Puyallup Station. Currently, buses cannot make this turn due to the intersection configuration; this project would improve the turn movements to accommodate transit turns at the intersection of 5th and Pioneer for a direct access to the station.
15. Provide employee and public restrooms at the Puyallup Station. Initial design did not include restrooms. Repeated requests from the community and adjacent businesses in the Downtown Puyallup area for these necessary amenities.
16. Pedestrian bridge between the north and south sides of the station to provide for ease of transfer; currently local passengers using buses have to walk to Meridian to go around the tracks to reach their transfer.
17. Installation of a signal system for buses and passengers to know what side of the tracks the train will be on; provide for real-time train signs.

Attachment 2
Communications/Event Promotions Samples

TACOMA DOME AND SOUTH TACOMA STATIONS

SOUNDER STATION ACCESS STUDY

OPEN HOUSE

Tuesday, Jan. 18, 2011 | 4 - 7 p.m.

University of Washington Tacoma, Jane Russell Commons
1918 Pacific Ave.
Tacoma, WA 98402



Do you ride Sounder?

How do you get to the train station? Do you have new or better ideas for how people might get to the station?

Sound Transit is studying access to and from Sounder rail stations. This information will be used to help plan future Sounder station improvements, which could include:

- Expanded parking
- Improved bike facilities
- Enhanced pedestrian access
- Better transit connections at the station

For more information about this study or event, contact Rachel Wilch at 206-398-5460 or rachel.wilch@soundtransit.org, or visit www.soundtransit.org/StationStudy

To request accommodations for persons with disabilities, call 1-800-201-4900 / TTY Relay: 711 or e-mail accessibility@soundtransit.org.

Para hablar con Sound Transit en español acerca del estudio Sounder Station Access Study, por favor llame al 1-800-823-9230 entre las 8 de la mañana, y las 5 de la tarde, de lunes a viernes.

Чтобы обсудить Sounder Station Access Study с сотрудником Sound Transit на русском языке, пожалуйста, звоните по телефону 1-800-823-9230 с 8 утра до 5 вечера с понедельника по пятницу.

Sounder Station Access Study 에 관하여 한국어로 문의를 원하시면 Sound Transit 사에 월요일에서 금요일 오전 8시에서 오후 5시 사이에 1-800-823-9230 번으로 전화해 주시기 바랍니다.

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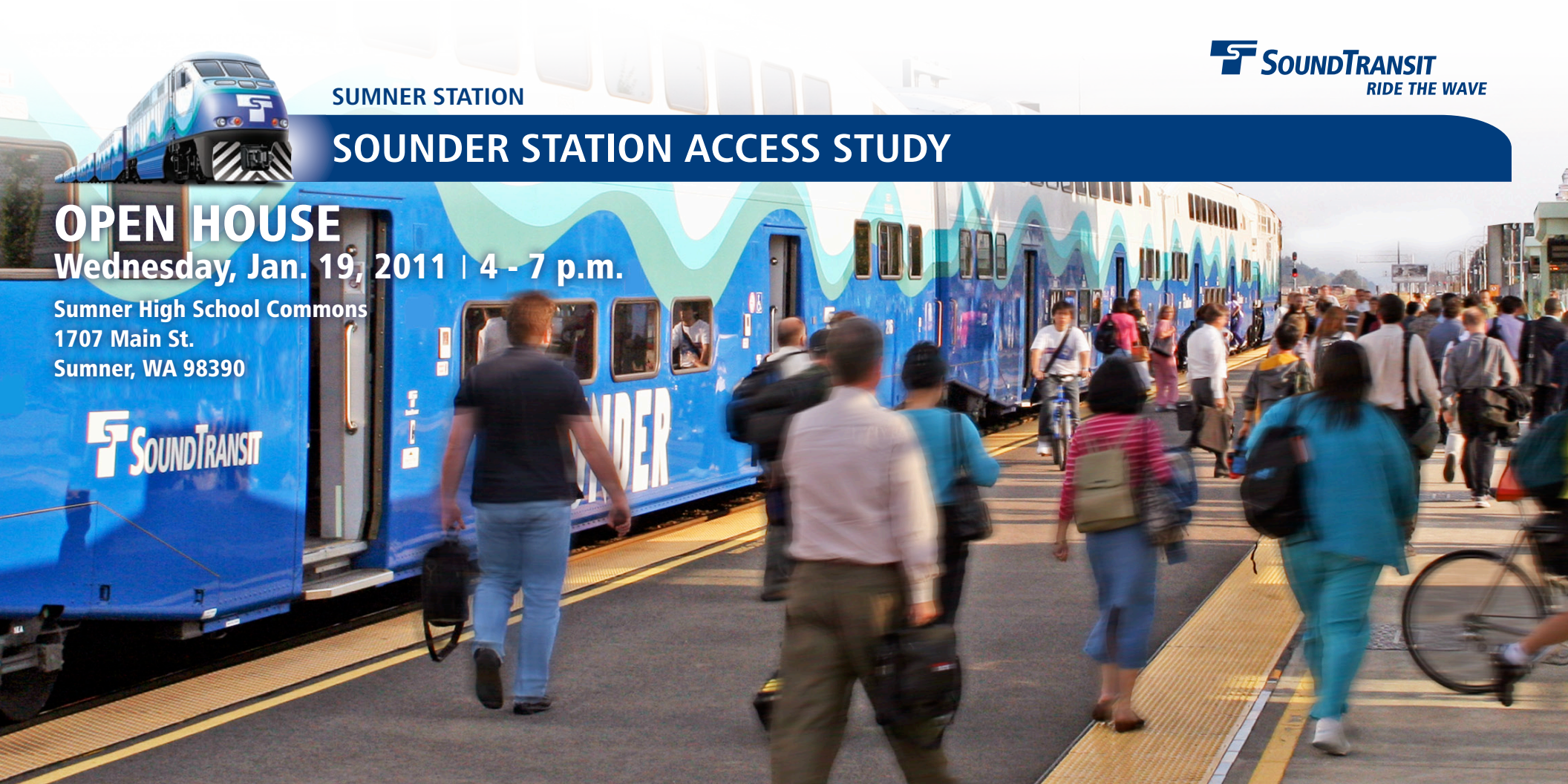
SUMNER STATION

SOUNDER STATION ACCESS STUDY

OPEN HOUSE

Wednesday, Jan. 19, 2011 | 4 - 7 p.m.

Sumner High School Commons
1707 Main St.
Sumner, WA 98390



Do you ride Sounder?

How do you get to the train station? Do you have new or better ideas for how people might get to the station?

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PUYALLUP STATION

SOUNDER STATION ACCESS STUDY

OPEN HOUSE

Thursday, Jan. 20, 2011 | 4 - 7 p.m.

Puyallup City Hall, Chamber Hall
333 S. Meridian
Puyallup, WA 98371



Do you ride Sounder?

How do you get to the train station? Do you have new or better ideas for how people might get to the station?

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LAKEWOOD STATION

SOUNDER STATION ACCESS STUDY

OPEN HOUSE

Tuesday, Jan. 25, 2011 | 4 - 7 p.m.

Lakewood Boys & Girls Club
10402 Kline St. S.W.
Lakewood, WA 98499

 **SOUNDTRANSIT**

Do you ride Sounder?

How do you get to the train station? Do you have new or better ideas for how people might get to the station?

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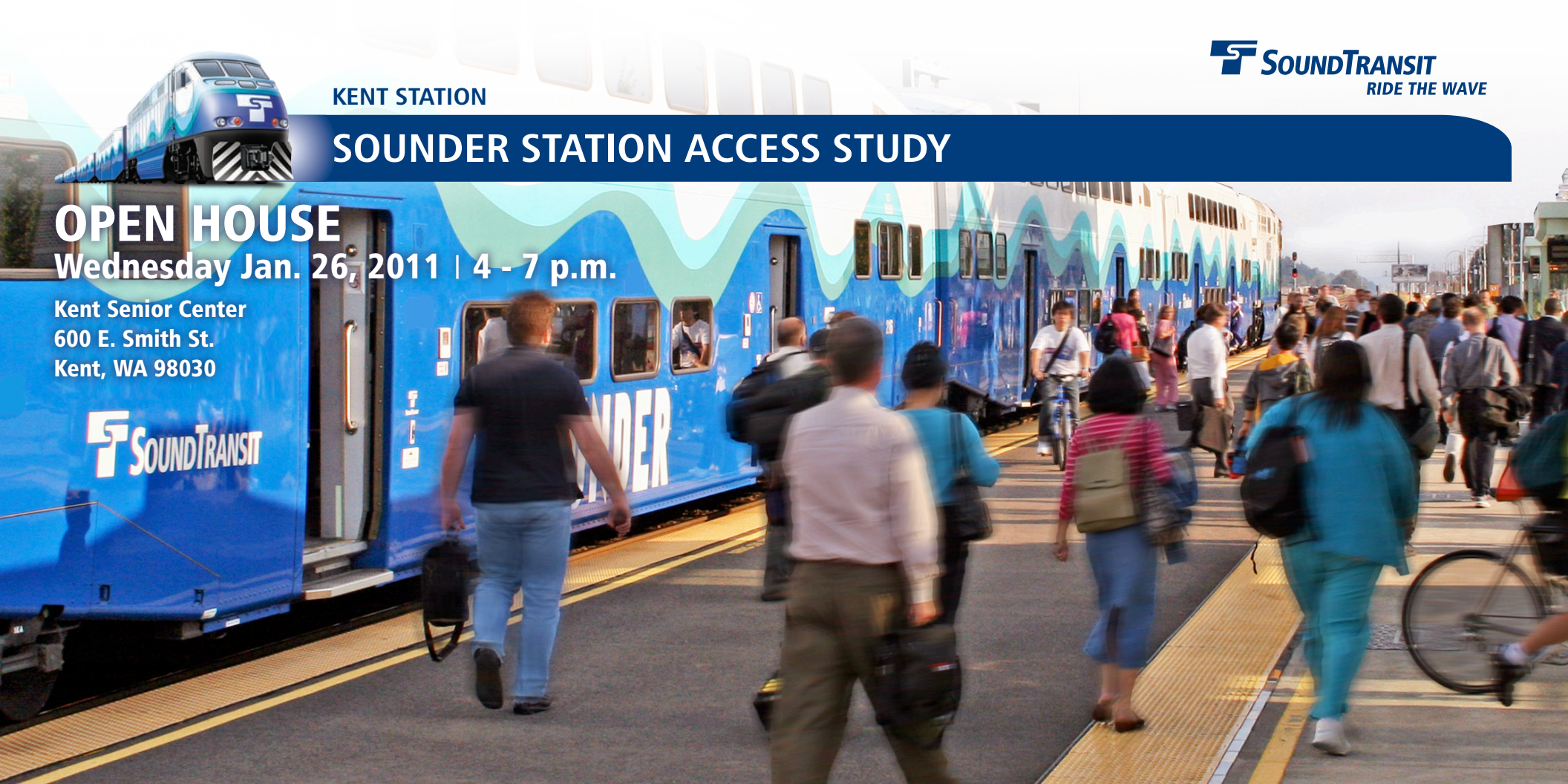
KENT STATION

SOUNDER STATION ACCESS STUDY

OPEN HOUSE

Wednesday Jan. 26, 2011 | 4 - 7 p.m.

Kent Senior Center
600 E. Smith St.
Kent, WA 98030



Do you ride Sounder?

How do you get to the train station? Do you have new or better ideas for how people might get to the station?

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AUBURN STATION

SOUNDER STATION ACCESS STUDY

OPEN HOUSE

Thursday Jan. 27, 2011 | 4 - 7 p.m.

Auburn City Hall, Council Chambers
25 W. Main St.
Auburn, WA 98001



Do you ride Sounder?

How do you get to the train station? Do you have new or better ideas for how people might get to the station?

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Sounder Station Access Study

Come share with Sound Transit your experiences as a commuter, neighbor or passerby. Public comments will help inform future station improvements.

OPEN HOUSES (all 4–7 p.m.)

DATE	LOCATION
Tues., Jan. 18	UW Tacoma, 1918 Pacific Ave.
Wed., Jan. 19	Sumner High School, 1707 Main St.
Thurs., Jan. 20	Puyallup City Hall, 333 S. Meridian
Tues., Jan. 25	Lakewood Boys & Girls Club, 10402 Kline St. S.W.
Wed., Jan. 26	Kent Senior Center, 600 E. Smith St.
Thurs., Jan. 27	Auburn City Hall, 25 W. Main St.

To request accommodations for persons with disabilities, call 1-800-201-4900 / TTY Relay: 711 or e-mail accessibility@soundtransit.org.

For more information, contact Rachel Wilch at 206-398-5460 or rachel.wilch@soundtransit.org, or visit www.soundtransit.org/StationStudy



Sound Transit, Union Station, 401 S. Jackson St., Seattle, WA 98104
1-800-201-4900, TTY Relay: 711, main@soundtransit.org



SOUNDER RIDERS

SHARE YOUR IDEAS

How could station access be improved? Come share your ideas as a commuter, neighbor or passerby. Public comments will help shape future station improvements.

OPEN HOUSES (all 4–7 p.m.)

DATE

LOCATION

Tues., Jan. 18 UW Tacoma, 1918 Pacific Ave.

Wed., Jan. 19 Sumner High School, 1707 Main St.

Thurs., Jan. 20 Puyallup City Hall, 333 S. Meridian

Tues., Jan. 25 Lakewood Boys & Girls Club, 10402 Kline St. S.W.

Wed., Jan. 26 Kent Senior Center, 600 E. Smith St.

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For more information, contact Rachel Wilch at 206-398-5460 or rachel.wilch@soundtransit.org, or visit www.soundtransit.org/StationStudy

From: Reason, Kimberly

Sent: Tuesday, January 04, 2011 12:26 PM

To: Reason, Kimberly

Subject: ST Media Advisory: Sound Transit to host open houses to discuss Sounder Station improvements



MEDIA ADVISORY

TO: Puget Sound Editors & Reporters

FROM: Kimberly Reason, (206) 689-3343, or kimberly.reason@soundtransit.org

DATE: January 4, 2011

SUBJECT: Sound Transit to host open houses to discuss Sounder Station improvements

WHAT: In January, Sound Transit will host a series of open houses in South Sound communities to present information on the Sounder Station Access Planning Study. The agency is conducting the study to identify potential improvements in the ways commuters access its Sounder stations.

Possible improvements the agency is studying include increased parking, pedestrian sidewalks, crosswalks and bridges, bicycle commute options, and transit facility enhancements.

Open houses will include:

- A description of Sound Transit service areas, transit routes, 2011 budget, and the Sound Transit 2 program
- Objectives of and timeline for the Sounder Station Access Planning Study
- Overview of existing station access issues and discussion of potential solutions
- Informal Q & A and public comment

WHEN: All events take place from 4:00 – 6:00 p.m.

Tacoma - Tuesday, Jan. 18

University of Washington -Tacoma

Jane Russell Commons

1918 Pacific Avenue

Sumner - Wednesday, Jan. 19

Sumner School

High School Commons

1707 Main St.

Puyallup - Thursday, Jan. 20

Puyallup City Hall: Chamber Hall

333 South Meridian

Lakewood – Tuesday, Jan. 25

Lakewood Boys & Girls Club

10402 Kline St SW

Kent - Wednesday, Jan. 26

Kent Senior Activity Center

600 E. Smith Street

Auburn - Thursday, Jan. 27

Auburn City Hall: Council Chamber

25 W. Main Street

The Station Access Study is part of the ST2 regional transit funding package that voters approved in November 2008. The study is planned through 2011.

From: Sound Transit [soundtransit@govdelivery.com]
Sent: Thursday, January 20, 2011 10:51 AM
To: Schmitt, Adam
Subject: Sounder Station Access Study Open Houses

This is a courtesy copy of an E-mail bulletin sent by Rider Alert .

This bulletin was sent to the following groups of people:

Subscribers of Sounder Rail Alerts (Tacoma-Seattle) (6173 recipients)

Begin E-mail Bulletin:

How could station access be improved? Come share your ideas as a commuter. Public comments will help shape future station improvements.

Open Houses (all 4-7 p.m.)

Thurs., Jan. 20 at Puyallup City Hall, 333 S. Meridian

Tues., Jan. 25 at Lakewood Boys & Girls Club, 10402 Kline St. S.W.

Wed., Jan. 26 at Kent Senior Center, 600 E. Smith St.

Thurs., Jan. 27 at Auburn City Hall, 25 W. Main St.

You can view or update your subscriptions, password or e-mail address at any time on your Subscriber Preferences Page. All you will need are your e-mail address and your password (if you selected one).

This e-mail service is provided to you at no charge by Sound Transit. If you have any questions or problems e-mail support@govdelivery.com for assistance.

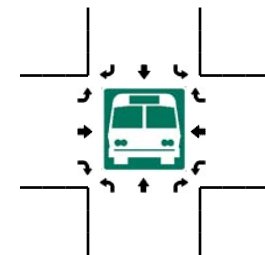
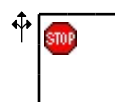
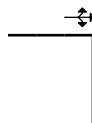
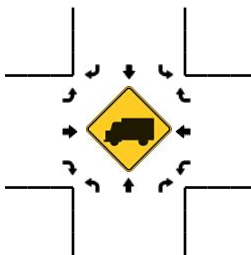
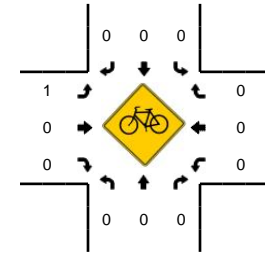
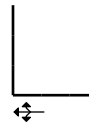
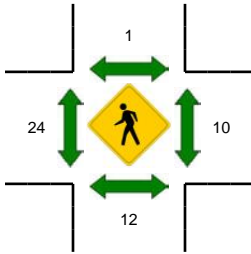
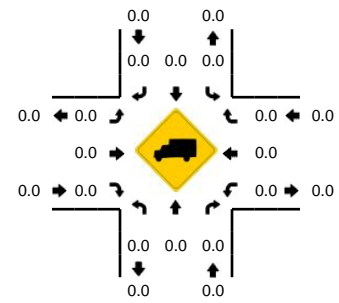
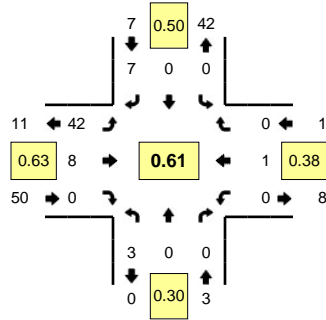
Appendix D

Traffic Counts

LOCATION: 1st St -- Sound Transit Parking
CITY/STATE: Mukilteo, WA

QC JOB #: 10553227
DATE: 11/8/2010

Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 8:10 AM -- 8:25 AM



5-Min Count Period Beginning At	1st St (Northbound)				1st St (Southbound)				Sound Transit Parking (Eastbound)				Sound Transit Parking (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:35 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
6:40 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	
6:45 AM	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	8	
6:50 AM	2	0	0	0	0	0	2	0	3	0	0	0	0	0	0	0	7	
6:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:05 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
7:10 AM	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	
7:15 AM	1	0	0	0	0	0	2	0	8	1	0	0	0	1	0	0	13	
7:20 AM	0	0	0	0	0	0	1	0	2	0	0	0	0	1	0	0	4	
7:25 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	42
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
7:35 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	44
7:40 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	44
7:45 AM	0	0	0	0	0	0	2	0	3	0	0	0	0	0	0	0	5	41
7:50 AM	0	0	0	0	0	0	1	0	11	3	0	0	0	0	0	0	15	49
7:55 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4	53
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	54
8:05 AM	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	4	57
8:10 AM	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	60
8:15 AM	3	0	0	0	0	0	0	0	8	1	0	0	0	0	0	0	12	59
8:20 AM	0	0	0	0	0	0	2	0	4	0	0	0	0	0	0	0	6	61
8:25 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	61
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	0	0	0	0	0	8	0	76	4	0	0	0	0	0	0	100	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians		32				0				60				24			116	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

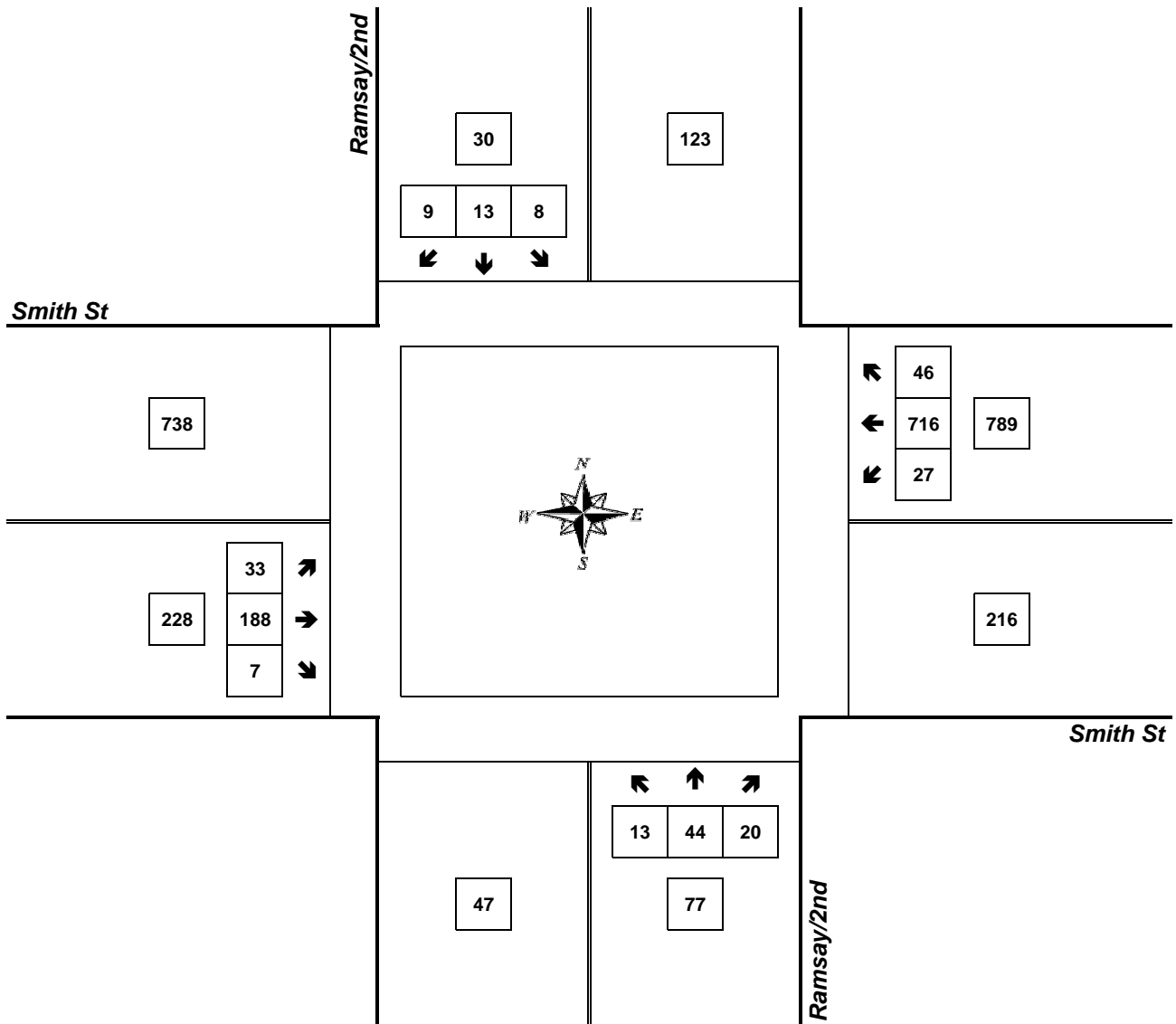
Peak Hour Summary



Mark Skaggs
(206) 251-0300

Ramsay/2nd & Smith St

7:30 AM to 8:30 AM
Thursday, June 11, 2009



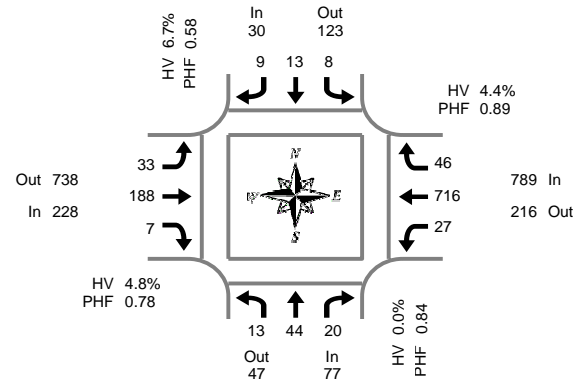
Approach	PHF	HV%	Volume
EB	0.78	4.8%	228
WB	0.89	4.4%	789
NB	0.84	0.0%	77
SB	0.58	6.7%	30
Intersection	0.87	4.3%	1,124

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Mark Skaggs
(206) 251-0300



Ramsay/2nd & Smith St

Thursday, June 11, 2009

7:00 AM to 9:00 AM

Peak Hour Summary
7:30 AM to 8:30 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Interval Total
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV	
7:00 AM	4	13	9	1	0	1	2	0	17	50	0	9	1	136	16	6	249
7:15 AM	7	17	3	0	6	3	3	1	9	32	0	4	4	185	7	10	276
7:30 AM	0	9	4	0	2	2	2	0	11	44	1	1	2	194	13	10	284
7:45 AM	2	19	2	0	3	5	5	0	8	36	3	3	6	176	7	9	272
8:00 AM	5	10	6	0	0	1	1	0	7	44	1	4	7	150	13	7	245
8:15 AM	6	6	8	0	3	5	1	2	7	64	2	3	12	196	13	9	323
8:30 AM	2	3	5	0	1	3	4	0	5	65	4	4	1	177	10	11	280
8:45 AM	4	2	6	0	5	4	1	1	1	75	1	1	17	139	15	6	270
Total Survey	30	79	43	1	20	24	19	4	65	410	12	29	50	1,353	94	68	2,199

Peak Hour Summary

7:30 AM to 8:30 AM

By Approach	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	77	47	124	0	30	123	153	2	228	738	966	11	789	216	1,005	35	1,124
%HV	0.0%				6.7%				4.8%				4.4%				4.3%
PHF	0.84				0.58				0.78				0.89				0.87

By Movement	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	13	44	20	77	8	13	9	30	33	188	7	228	27	716	46	789	1,124
PHF	0.54	0.58	0.63	0.84	0.67	0.65	0.45	0.58	0.75	0.73	0.58	0.78	0.56	0.91	0.88	0.89	0.87

Rolling Hour Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Interval Total
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV	
7:00 AM	13	58	18	1	11	11	12	1	45	162	4	17	13	691	43	35	1,081
7:15 AM	14	55	15	0	11	11	11	1	35	156	5	12	19	705	40	36	1,077
7:30 AM	13	44	20	0	8	13	9	2	33	188	7	11	27	716	46	35	1,124
7:45 AM	15	38	21	0	7	14	11	2	27	209	10	14	26	699	43	36	1,120
8:00 AM	17	21	25	0	9	13	7	3	20	248	8	12	37	662	51	33	1,118

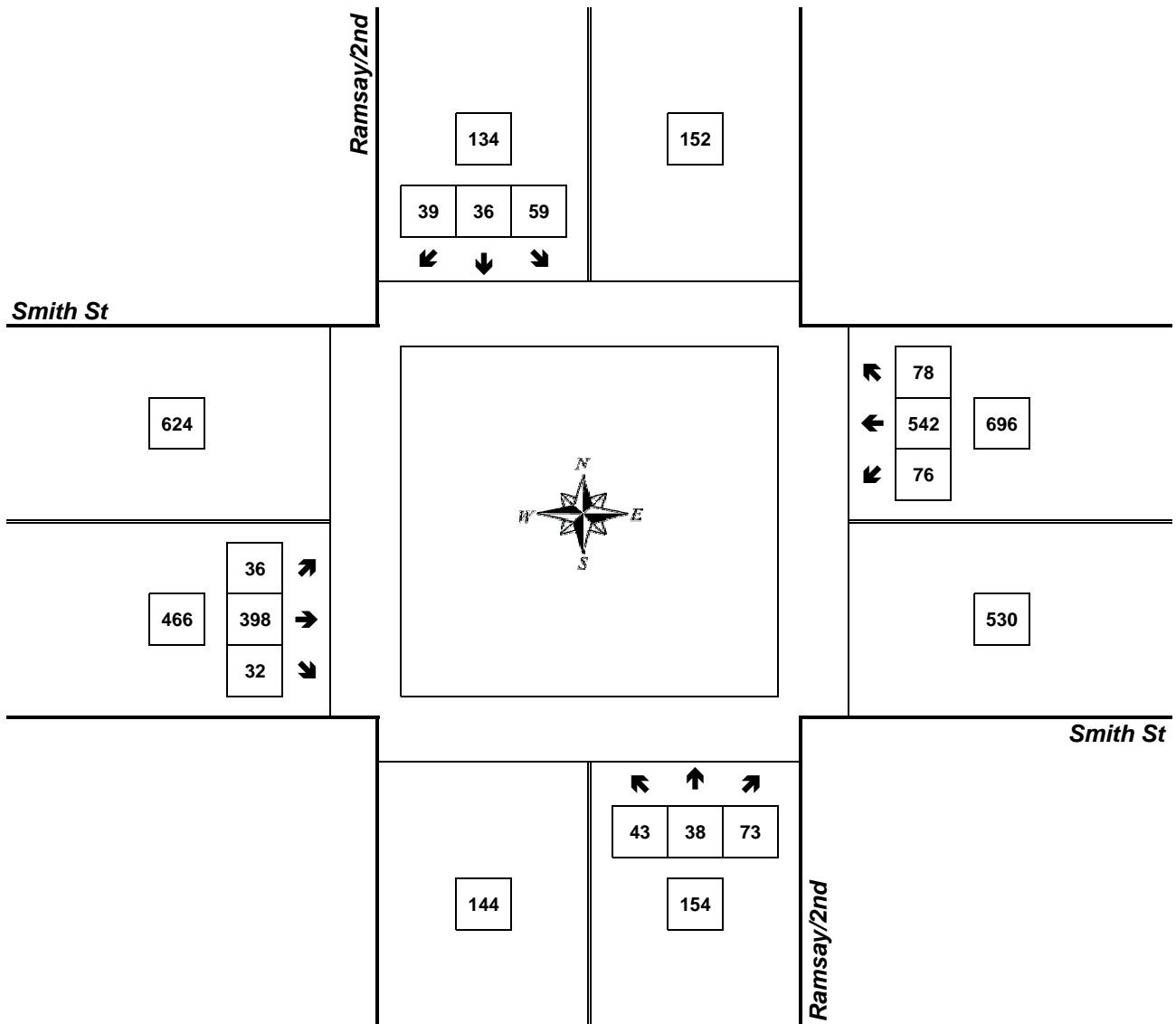
Peak Hour Summary



Mark Skaggs
(206) 251-0300

Ramsay/2nd & Smith St

12:30 PM to 1:30 PM
Thursday, June 11, 2009



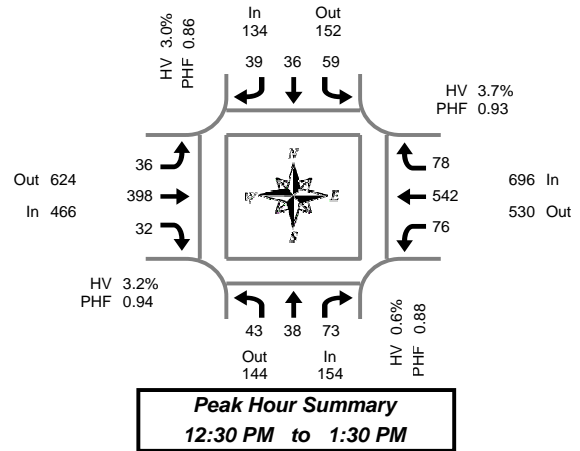
Approach	PHF	HV%	Volume
EB	0.94	3.2%	466
WB	0.93	3.7%	696
NB	0.88	0.6%	154
SB	0.86	3.0%	134
Intersection	0.92	3.2%	1,450

Count Period: 12:00 PM to 2:00 PM

Total Vehicle Summary



Mark Skaggs
(206) 251-0300



Ramsay/2nd & Smith St

Thursday, June 11, 2009

12:00 PM to 2:00 PM

15-Minute Interval Summary

12:00 PM to 2:00 PM

Interval Start Time	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Interval Total
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV	
12:00 PM	11	12	24	0	13	10	9	1	10	96	9	4	20	109	18	5	341
12:15 PM	12	6	18	0	13	10	7	0	4	104	9	6	14	128	21	13	346
12:30 PM	14	13	17	0	14	8	8	2	11	88	7	4	16	147	14	4	357
12:45 PM	13	5	25	0	16	10	13	1	9	108	7	5	25	139	24	12	394
1:00 PM	7	7	15	1	15	11	10	1	9	106	8	4	14	123	21	3	346
1:15 PM	9	13	16	0	14	7	8	0	7	96	10	2	21	133	19	7	353
1:30 PM	12	7	18	2	18	5	13	1	3	84	8	1	21	118	9	8	316
1:45 PM	11	7	15	1	16	7	6	1	7	111	8	3	16	140	11	8	355
Total Survey	89	70	148	4	119	68	74	7	60	793	66	29	147	1,037	137	60	2,808

Peak Hour Summary

12:30 PM to 1:30 PM

By Approach	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	154	144	298	1	134	152	286	4	466	624	1,090	15	696	530	1,226	26	1,450
%HV	0.6%				3.0%				3.2%				3.7%				3.2%
PHF	0.88				0.86				0.94				0.93				0.92

By Movement	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	43	38	73	154	59	36	39	134	36	398	32	466	76	542	78	696	1,450
PHF	0.77	0.73	0.73	0.88	0.92	0.82	0.75	0.86	0.82	0.92	0.80	0.94	0.76	0.92	0.81	0.93	0.92

Rolling Hour Summary

12:00 PM to 2:00 PM

Interval Start Time	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Interval Total
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV	
12:00 PM	50	36	84	0	56	38	37	4	34	396	32	19	75	523	77	34	1,438
12:15 PM	46	31	75	1	58	39	38	4	33	406	31	19	69	537	80	32	1,443
12:30 PM	43	38	73	1	59	36	39	4	36	398	32	15	76	542	78	26	1,450
12:45 PM	41	32	74	3	63	33	44	3	28	394	33	12	81	513	73	30	1,409
1:00 PM	39	34	64	4	63	30	37	3	26	397	34	10	72	514	60	26	1,370

Peak Hour Summary

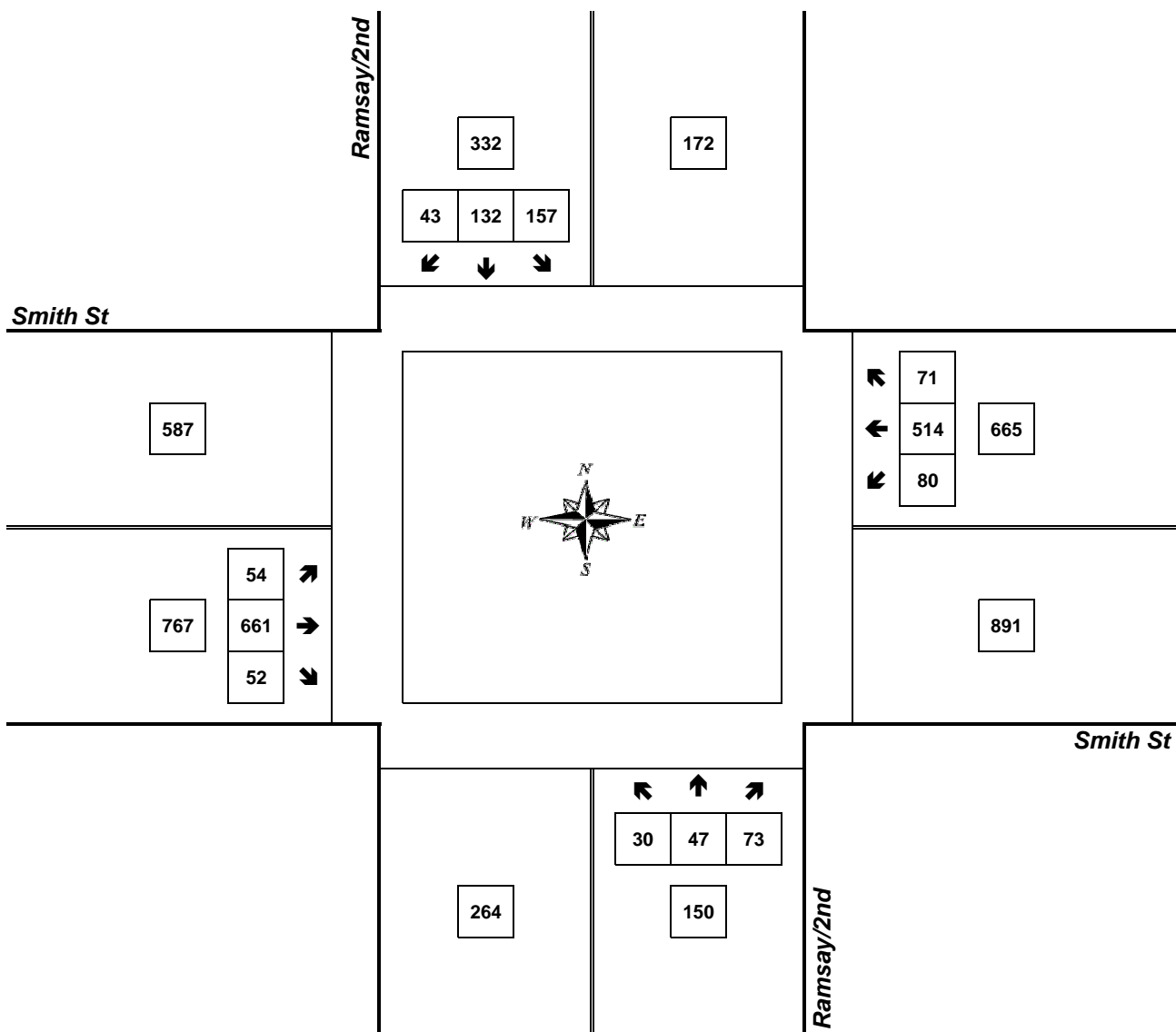


Mark Skaggs
(206) 251-0300

Ramsay/2nd & Smith St

4:45 PM to 5:45 PM

Thursday, June 11, 2009



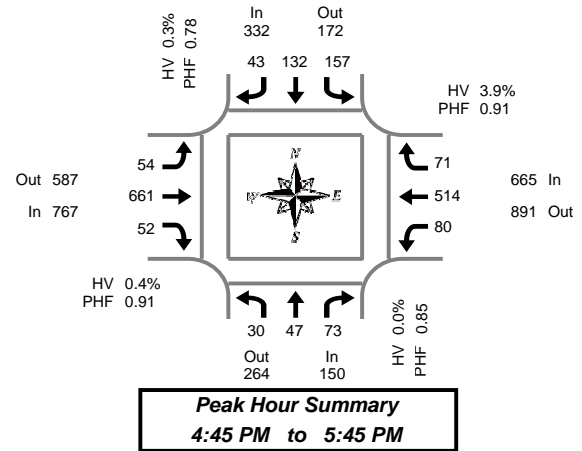
Approach	PHF	HV%	Volume
EB	0.91	0.4%	767
WB	0.91	3.9%	665
NB	0.85	0.0%	150
SB	0.78	0.3%	332
Intersection	0.96	1.6%	1,914

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Mark Skaggs
(206) 251-0300



Ramsay/2nd & Smith St

Thursday, June 11, 2009

4:00 PM to 6:00 PM

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Interval Total
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV	
4:00 PM	16	16	33	0	33	13	14	1	9	136	13	2	24	105	14	6	426
4:15 PM	11	9	19	0	27	25	16	1	5	153	14	4	13	136	12	9	440
4:30 PM	11	6	25	0	36	31	14	0	10	150	9	1	16	124	11	8	443
4:45 PM	8	17	18	0	39	23	11	0	14	180	16	3	16	121	17	11	480
5:00 PM	3	13	20	0	47	50	9	1	15	152	10	0	20	124	15	5	478
5:15 PM	9	7	11	0	33	13	10	0	7	183	12	0	21	134	15	5	455
5:30 PM	10	10	24	0	38	46	13	0	18	146	14	0	23	135	24	5	501
5:45 PM	11	8	17	0	44	21	14	1	14	122	2	0	18	127	26	6	424
Total Survey	79	86	167	0	297	222	101	4	92	1,222	90	10	151	1,006	134	55	3,647

Peak Hour Summary

4:45 PM to 5:45 PM

By Approach	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	150	264	414	0	332	172	504	1	767	587	1,354	3	665	891	1,556	26	1,914
%HV	0.0%				0.3%				0.4%				3.9%				1.6%
PHF	0.85				0.78				0.91				0.91				0.96

By Movement	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	30	47	73	150	157	132	43	332	54	661	52	767	80	514	71	665	1,914
PHF	0.75	0.69	0.76	0.85	0.84	0.66	0.83	0.78	0.75	0.90	0.81	0.91	0.87	0.95	0.74	0.91	0.96

Rolling Hour Summary

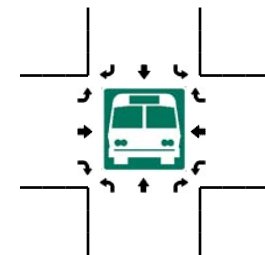
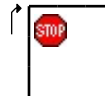
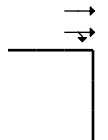
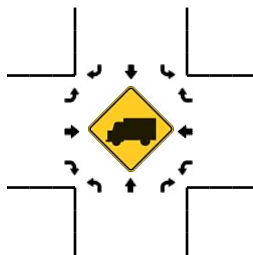
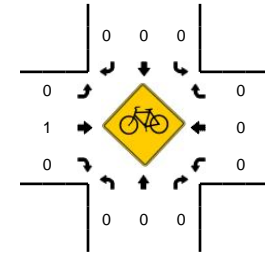
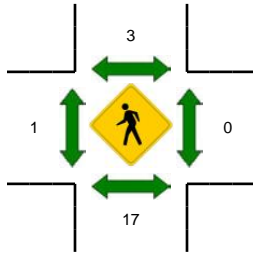
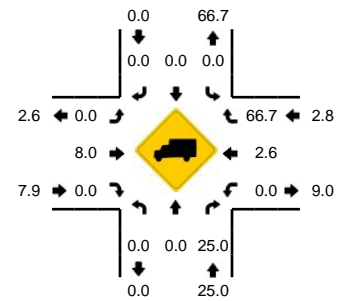
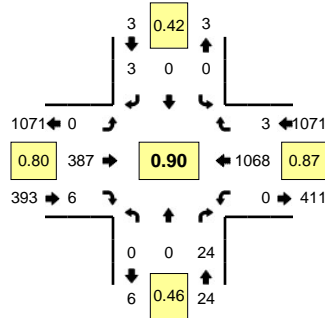
4:00 PM to 6:00 PM

Interval Start Time	Northbound Ramsay/2nd				Southbound Ramsay/2nd				Eastbound Smith St				Westbound Smith St				Interval Total
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV	
4:00 PM	46	48	95	0	135	92	55	2	38	619	52	10	69	486	54	34	1,789
4:15 PM	33	45	82	0	149	129	50	2	44	635	49	8	65	505	55	33	1,841
4:30 PM	31	43	74	0	155	117	44	1	46	665	47	4	73	503	58	29	1,856
4:45 PM	30	47	73	0	157	132	43	1	54	661	52	3	80	514	71	26	1,914
5:00 PM	33	38	72	0	162	130	46	2	54	603	38	0	82	520	80	21	1,858

LOCATION: 1st Ave N -- W James St
CITY/STATE: Kent, WA

QC JOB #: 10553201
DATE: 11/3/2010

Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 7:35 AM -- 7:50 AM



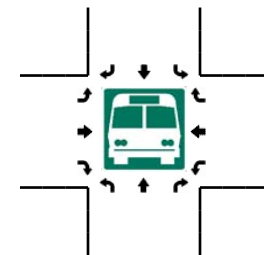
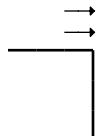
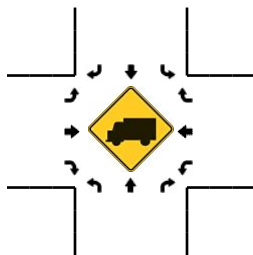
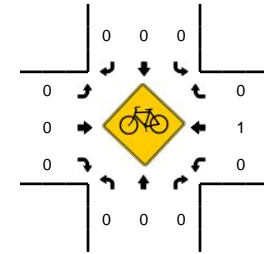
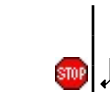
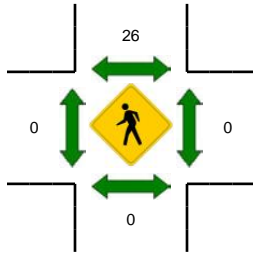
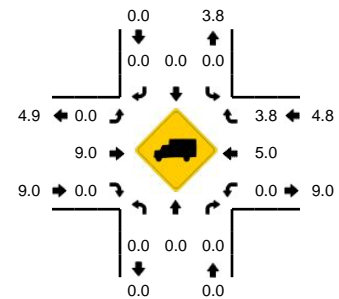
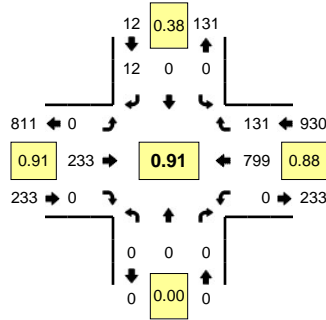
5-Min Count Period Beginning At	1st Ave N (Northbound)				1st Ave N (Southbound)				W James St (Eastbound)				W James St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	5	0	0	0	0	0	0	18	0	0	0	54	0	0	77	
6:35 AM	0	0	1	0	0	0	0	0	0	21	0	0	0	79	1	0	102	
6:40 AM	0	0	4	0	0	0	0	0	0	26	2	0	0	87	0	0	119	
6:45 AM	0	0	0	0	0	0	0	0	0	23	1	0	0	91	0	0	115	
6:50 AM	0	0	1	0	0	0	0	0	0	22	2	0	0	89	1	0	115	
6:55 AM	0	0	1	0	0	0	0	0	0	26	2	0	0	63	1	0	93	
7:00 AM	0	0	2	0	0	0	0	0	0	18	1	0	0	64	1	0	86	
7:05 AM	0	0	3	0	0	0	0	0	0	25	2	0	0	71	0	0	101	
7:10 AM	0	0	4	0	0	0	0	0	0	21	1	0	0	112	0	0	138	
7:15 AM	0	0	0	0	0	0	1	0	0	17	1	0	0	83	0	0	102	
7:20 AM	0	0	0	0	0	0	1	0	0	8	2	0	0	64	1	0	76	
7:25 AM	0	0	0	0	0	0	1	0	0	48	0	0	0	97	0	0	146	1270
7:30 AM	0	0	4	0	0	0	1	0	0	21	0	0	0	104	0	0	130	1323
7:35 AM	0	0	0	0	0	0	1	0	0	25	0	0	0	100	0	0	126	1347
7:40 AM	0	0	2	0	0	0	0	0	0	29	0	0	0	101	1	0	133	1361
7:45 AM	0	0	0	0	0	0	0	0	0	37	2	0	0	113	1	0	153	1399
7:50 AM	0	0	3	0	0	0	0	0	0	16	0	0	0	106	0	0	125	1409
7:55 AM	0	0	1	0	0	0	0	0	0	28	1	0	0	96	0	0	126	1442
8:00 AM	0	0	0	0	0	0	0	0	0	30	0	0	0	51	0	0	81	1437
8:05 AM	0	0	1	0	0	0	0	0	0	46	2	0	0	95	0	0	144	1480
8:10 AM	0	0	8	0	0	0	0	0	0	33	0	0	0	93	0	0	134	1476
8:15 AM	0	0	4	0	0	0	0	0	0	42	0	0	0	63	1	0	110	1484
8:20 AM	0	0	1	0	0	0	0	0	0	32	1	0	0	49	0	0	83	1491
8:25 AM	0	0	0	0	0	0	0	0	0	38	1	0	0	51	0	0	90	1435
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	8	0	0	0	4	0	0	364	8	0	0	1256	8	0	1648	
Heavy Trucks	0	0	4	0	0	0	0	0	0	36	0	0	0	28	4	0	72	
Pedestrians	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

LOCATION: 1st Ave N -- W Smith St
CITY/STATE: Kent, WA

QC JOB #: 10553202
DATE: 11/3/2010

Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:35 AM -- 7:50 AM



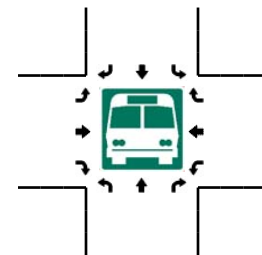
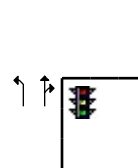
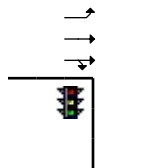
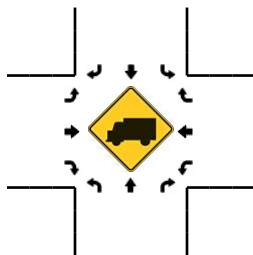
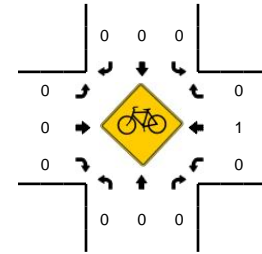
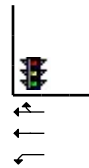
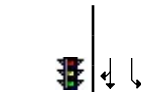
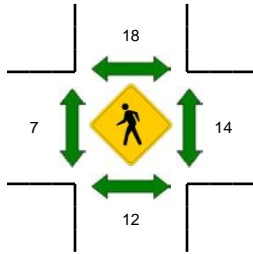
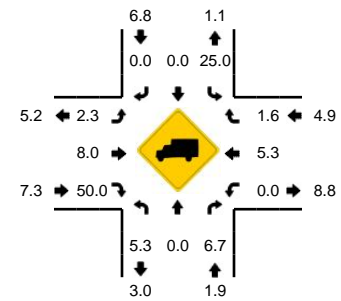
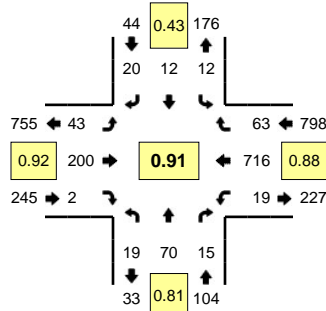
5-Min Count Period Beginning At	1st Ave N (Northbound)				1st Ave N (Southbound)				W Smith St (Eastbound)				W Smith St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	0	13	0	0	0	31	6	0	50	
6:35 AM	0	0	0	0	0	0	1	0	0	9	0	0	0	59	9	0	78	
6:40 AM	0	0	0	0	0	0	1	0	0	8	0	0	0	57	24	0	90	
6:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	67	32	0	104	
6:50 AM	0	0	0	0	0	0	0	0	0	12	0	0	0	70	33	0	115	
6:55 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	49	17	0	70	
7:00 AM	0	0	0	0	0	0	1	0	0	11	0	0	0	46	9	0	67	
7:05 AM	0	0	0	0	0	0	0	0	0	13	0	0	0	70	14	0	97	
7:10 AM	0	0	0	0	0	0	0	0	0	22	0	0	0	50	32	0	104	
7:15 AM	0	0	0	0	0	0	2	0	0	18	0	0	0	74	26	0	120	
7:20 AM	0	0	0	0	0	0	1	0	0	26	0	0	0	48	4	0	79	
7:25 AM	0	0	0	0	0	0	0	0	0	14	0	0	0	85	6	0	105	1079
7:30 AM	0	0	0	0	0	0	1	0	0	24	0	0	0	59	7	0	91	1120
7:35 AM	0	0	0	0	0	0	0	0	0	15	0	0	0	72	13	0	100	1142
7:40 AM	0	0	0	0	0	0	0	0	0	14	0	0	0	56	25	0	95	1147
7:45 AM	0	0	0	0	0	0	0	0	0	17	0	0	0	88	22	0	127	1170
7:50 AM	0	0	0	0	0	0	0	0	0	21	0	0	0	60	11	0	92	1147
7:55 AM	0	0	0	0	0	0	0	0	0	24	0	0	0	59	7	0	90	1167
8:00 AM	0	0	0	0	0	0	2	0	0	10	0	0	0	46	2	0	60	1160
8:05 AM	0	0	0	0	0	0	1	0	0	24	0	0	0	77	3	0	105	1168
8:10 AM	0	0	0	0	0	0	5	0	0	26	0	0	0	75	5	0	111	1175
8:15 AM	0	0	0	0	0	0	1	0	0	18	0	0	0	54	9	0	82	1137
8:20 AM	0	0	0	0	0	0	0	0	0	15	0	0	0	49	10	0	74	1132
8:25 AM	0	0	0	0	0	0	1	0	0	13	0	0	0	55	4	0	73	1100
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	184	0	0	0	864	240	0	1288	
Heavy Trucks	0	0	0	0	0	0	0	0	0	20	0	0	0	32	4	0	56	
Pedestrians	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

LOCATION: 2nd Ave N -- W Smith St
CITY/STATE: Kent, WA

QC JOB #: 10553203
DATE: 11/3/2010

Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

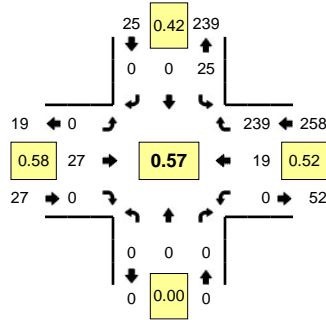


5-Min Count Period Beginning At	2nd Ave N (Northbound)				2nd Ave N (Southbound)				W Smith St (Eastbound)				W Smith St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	4	0	0	0	0	1	0	1	11	0	0	1	31	0	0	49	
6:35 AM	0	1	0	0	0	1	0	0	6	11	0	0	0	60	4	0	83	
6:40 AM	0	8	1	0	0	0	0	0	4	4	0	0	1	61	4	0	83	
6:45 AM	0	8	0	0	1	1	1	0	6	5	1	0	2	52	2	0	79	
6:50 AM	1	4	1	0	0	0	2	0	4	13	0	0	0	66	8	0	99	
6:55 AM	1	5	1	0	0	0	1	0	4	3	0	0	0	45	2	0	62	
7:00 AM	2	7	1	0	0	1	0	0	2	13	0	0	3	60	2	0	91	
7:05 AM	2	7	0	0	2	2	0	0	7	10	0	0	1	46	3	0	80	
7:10 AM	1	6	1	0	0	1	2	0	7	19	0	0	0	59	3	0	99	
7:15 AM	0	7	1	0	1	0	1	0	3	11	0	0	3	65	6	0	98	
7:20 AM	4	2	1	0	0	2	0	0	0	25	0	0	3	36	3	0	76	
7:25 AM	2	3	0	0	0	0	2	0	2	17	0	0	1	81	5	0	113	1012
7:30 AM	2	4	4	0	0	0	1	0	7	16	0	0	2	53	3	0	92	1055
7:35 AM	0	5	2	0	0	1	2	0	4	13	1	0	0	77	4	0	109	1081
7:40 AM	0	9	0	0	1	0	0	0	5	15	0	0	0	44	4	0	78	1076
7:45 AM	0	10	1	0	1	2	2	0	6	15	0	0	2	81	13	0	133	1130
7:50 AM	3	8	2	0	1	1	1	0	5	18	0	0	0	44	4	0	87	1118
7:55 AM	2	6	1	0	1	0	2	0	2	23	0	0	2	65	3	0	107	1163
8:00 AM	2	8	1	0	0	0	2	0	5	7	0	0	1	32	4	0	62	1134
8:05 AM	0	4	1	0	0	1	0	0	2	26	0	0	1	72	9	0	116	1170
8:10 AM	4	4	1	0	7	5	7	0	2	14	1	0	4	66	5	0	120	1191
8:15 AM	0	2	3	0	5	0	5	0	5	10	1	0	3	48	5	0	87	1180
8:20 AM	0	4	1	0	1	0	0	0	2	16	1	0	1	40	5	0	71	1175
8:25 AM	0	0	0	0	1	0	0	0	1	20	0	0	6	55	3	0	86	1148
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	20	96	16	0	12	12	20	0	52	224	0	0	16	760	80	0	1308	
Heavy Trucks	0	0	0	0	0	0	0	0	4	16	0	0	0	32	0	0	52	
Pedestrians		20				8				12				12			52	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

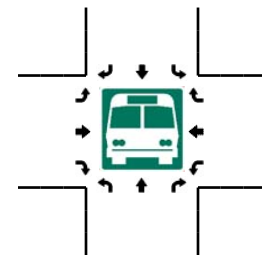
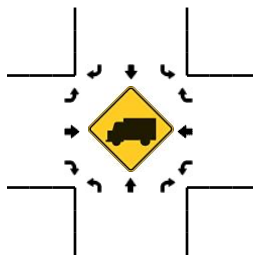
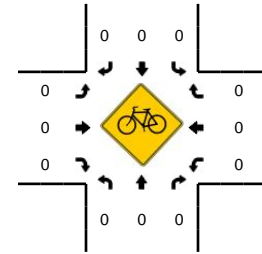
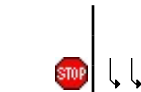
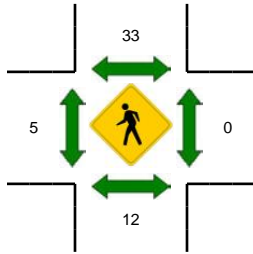
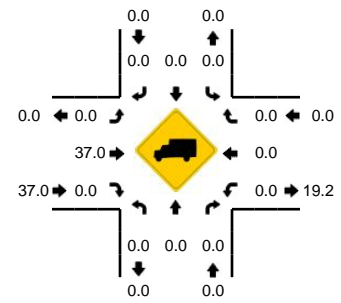
Comments:

LOCATION: Parking Garage Dwy -- 2nd St NW
CITY/STATE: Auburn, WA

QC JOB #: 10553204
DATE: 11/2/2010



Peak-Hour: 6:30 AM -- 7:30 AM
Peak 15-Min: 6:35 AM -- 6:50 AM



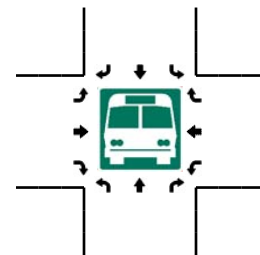
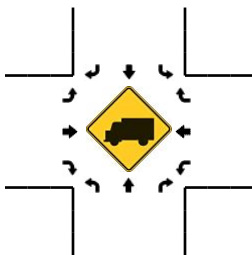
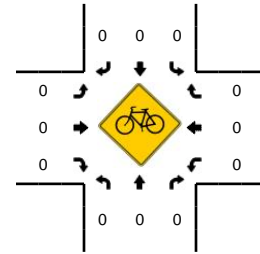
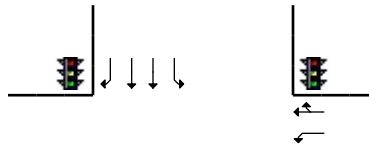
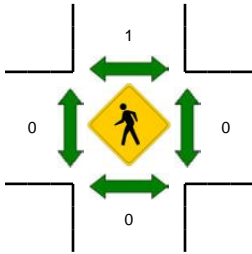
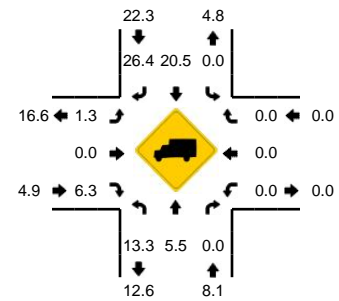
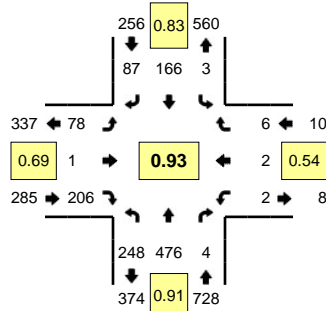
5-Min Count Period Beginning At	Parking Garage Dwy (Northbound)				Parking Garage Dwy (Southbound)				2nd St NW (Eastbound)				2nd St NW (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
6:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	19	0	20		
6:35 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	30	0	32		
6:40 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	3	58	0	66		
6:45 AM	0	0	0	0	1	0	0	0	0	4	0	0	0	3	30	0	38		
6:50 AM	0	0	0	0	2	0	0	0	0	3	0	0	0	0	2	5	0	12	310
6:55 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	11	0	13	
7:00 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	1	25	0	29	
7:05 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	30	0	35	
7:10 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	26	0	29	
7:15 AM	0	0	0	0	17	0	0	0	0	3	0	0	0	0	4	2	0	26	
7:20 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	
7:25 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	3	0	8	
7:30 AM	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	3	0	7	
7:35 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	4	
7:40 AM	0	0	0	0	1	0	1	0	0	4	0	0	0	0	1	5	0	12	
7:45 AM	0	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	5	
7:50 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
8:05 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	4	
8:10 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	2	0	7	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	
8:20 AM	0	0	0	0	2	0	0	0	0	3	0	0	0	0	2	3	0	10	
8:25 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	4	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	0	0	0	0	8	0	0	0	0	36	0	0	0	0	28	472	0	544	
Heavy Trucks	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16	
Pedestrians		8				64				4					0			76	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0			0	
Railroad																			
Stopped Buses																			

Comments:

LOCATION: C St NW -- South Dwy
CITY/STATE: Auburn, WA

QC JOB #: 10553205
DATE: 11/2/2010

Peak-Hour: 6:55 AM -- 7:55 AM
Peak 15-Min: 6:55 AM -- 7:10 AM



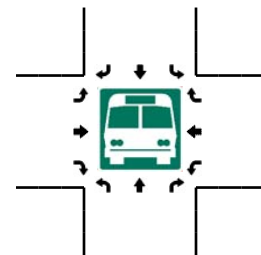
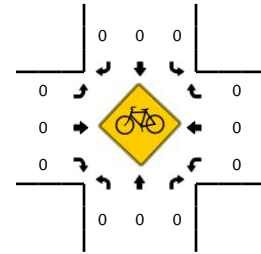
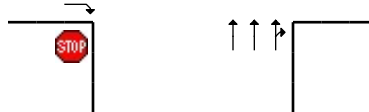
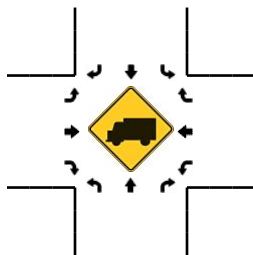
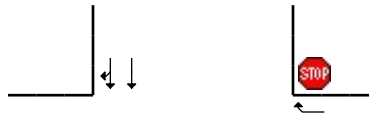
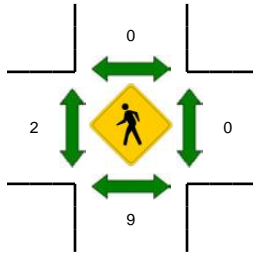
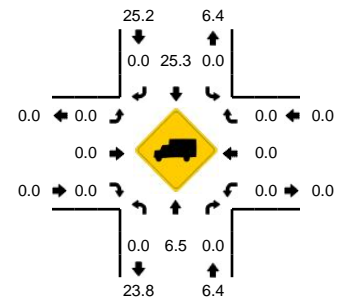
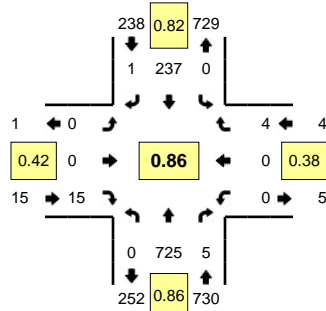
5-Min Count Period Beginning At	C St NW (Northbound)				C St NW (Southbound)				South Dwy (Eastbound)				South Dwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	26	23	2	0	0	11	5	0	6	0	11	0	1	1	0	0	86	
6:35 AM	21	31	1	0	0	10	6	0	5	2	16	0	1	1	0	0	94	
6:40 AM	23	42	0	0	0	6	6	0	5	1	25	0	1	0	0	0	109	
6:45 AM	23	34	0	0	0	13	6	0	8	1	24	0	0	0	1	0	110	
6:50 AM	17	36	0	0	0	14	9	0	12	1	20	0	0	0	0	0	109	
6:55 AM	24	28	0	0	0	16	8	0	10	0	40	0	0	0	0	0	126	
7:00 AM	23	37	0	0	0	21	9	0	4	0	18	0	0	0	0	0	112	
7:05 AM	14	46	1	0	1	13	9	0	8	1	14	0	0	0	0	0	107	
7:10 AM	24	30	2	0	0	11	8	0	9	0	15	0	0	0	2	0	101	
7:15 AM	15	37	1	0	0	14	5	0	10	0	12	0	2	0	1	0	97	
7:20 AM	26	48	0	0	0	7	14	0	3	0	20	0	0	1	0	0	119	
7:25 AM	22	42	0	0	0	10	4	0	5	0	16	0	0	0	1	0	100	1270
7:30 AM	21	26	0	0	1	0	5	0	5	0	10	0	0	0	0	0	68	1252
7:35 AM	24	46	0	0	1	17	6	0	3	0	13	0	0	0	1	0	111	1269
7:40 AM	21	41	0	0	0	15	7	0	6	0	14	0	0	1	1	0	106	1266
7:45 AM	17	51	0	0	0	23	5	0	5	0	13	0	0	0	0	0	114	1270
7:50 AM	17	44	0	0	0	19	7	0	10	0	21	0	0	0	0	0	118	1279
7:55 AM	10	44	0	0	0	10	8	0	7	0	21	0	0	0	0	0	100	1253
8:00 AM	17	38	0	0	0	14	4	0	6	0	14	0	0	0	0	0	93	1234
8:05 AM	14	37	1	0	0	14	7	0	3	0	13	0	1	0	0	0	90	1217
8:10 AM	14	22	1	0	0	7	8	0	2	0	17	0	0	0	0	0	71	1187
8:15 AM	10	21	0	0	0	12	7	0	1	0	11	0	1	0	0	0	63	1153
8:20 AM	18	28	1	0	0	10	10	0	0	1	9	0	1	0	0	0	78	1112
8:25 AM	14	25	0	0	1	13	5	0	6	0	7	0	0	0	0	0	71	1083
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	244	444	4	0	4	200	104	0	88	4	288	0	0	0	0	0	1380	
Heavy Trucks	20	32	0	0	0	56	40	0	0	0	8	0	0	0	0	0	156	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments: Optional 1

LOCATION: C St NW -- 1st St SW/North Dwy
CITY/STATE: Auburn, WA

QC JOB #: 10553206
DATE: 11/2/2010

Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



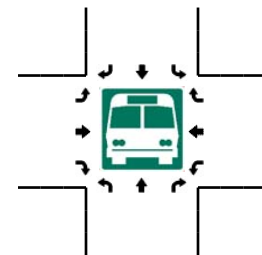
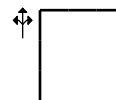
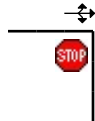
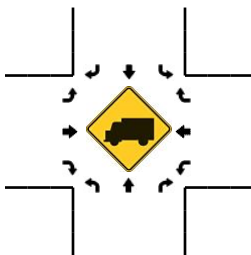
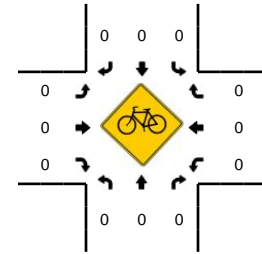
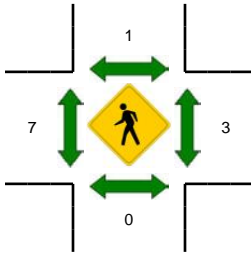
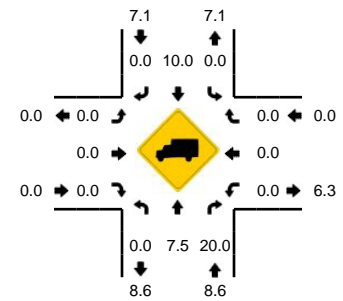
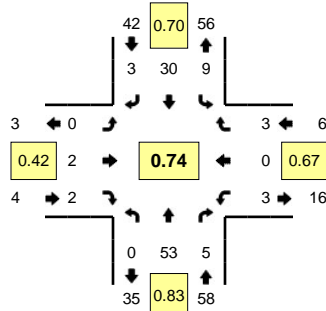
5-Min Count Period Beginning At	C St NW (Northbound)				C St NW (Southbound)				1st St SW/North Dwy (Eastbound)				1st St SW/North Dwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	37	0	0	0	16	0	0	0	0	1	0	0	0	0	0	54	
6:35 AM	0	51	0	0	0	16	0	0	0	0	2	0	0	0	0	0	69	
6:40 AM	0	54	0	0	0	9	0	0	0	0	2	0	0	0	0	0	65	
6:45 AM	0	56	0	0	0	18	0	0	0	0	3	0	0	0	1	0	78	
6:50 AM	0	59	0	0	0	19	0	0	0	0	4	0	0	0	1	0	83	
6:55 AM	0	55	0	0	0	23	0	0	0	0	0	0	0	0	0	0	78	
7:00 AM	0	54	0	0	0	29	0	0	0	0	1	0	0	0	0	0	84	
7:05 AM	0	65	0	0	0	24	0	0	0	0	0	0	0	0	1	0	90	
7:10 AM	0	51	1	0	0	18	0	0	0	0	1	0	0	0	1	0	72	
7:15 AM	0	59	1	0	0	23	0	0	0	0	1	0	0	0	1	0	85	
7:20 AM	0	64	0	0	0	15	0	0	0	0	0	0	0	0	0	0	79	
7:25 AM	0	60	1	0	0	12	0	0	0	0	2	0	0	0	0	0	75	912
7:30 AM	0	44	0	0	0	13	0	0	0	0	0	0	0	0	0	0	57	915
7:35 AM	0	57	1	0	0	14	1	0	0	0	3	0	0	0	0	0	76	922
7:40 AM	0	56	1	0	0	24	0	0	0	0	0	0	0	0	0	0	81	938
7:45 AM	0	76	0	0	0	25	0	0	0	0	2	0	0	0	1	0	104	964
7:50 AM	0	70	0	0	0	27	0	0	0	0	3	0	0	0	0	0	100	981
7:55 AM	0	69	0	0	0	13	0	0	0	0	2	0	0	0	0	0	84	987
8:00 AM	0	61	0	0	0	6	0	0	0	0	10	0	0	0	0	0	77	980
8:05 AM	0	49	0	0	0	20	1	0	0	0	1	0	0	0	0	0	71	961
8:10 AM	0	38	0	0	0	14	0	0	0	0	1	0	0	0	1	0	54	943
8:15 AM	0	26	1	0	0	17	0	0	0	0	1	0	0	0	1	0	46	904
8:20 AM	0	33	0	0	0	19	0	0	0	0	0	0	0	0	1	0	53	878
8:25 AM	0	41	0	0	0	19	0	0	0	0	1	0	0	0	2	0	63	866
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	860	0	0	0	260	0	0	0	0	28	0	0	0	4	0	1152	
Heavy Trucks	0	60	0	0	0	68	0	0	0	0	0	0	0	0	0	0	128	
Pedestrians	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments: Optional 2

LOCATION: Narrow St -- Harrison St
CITY/STATE: Sumner, WA

QC JOB #: 10553207
DATE: 11/3/2010

Peak-Hour: 6:40 AM -- 7:40 AM
Peak 15-Min: 7:00 AM -- 7:15 AM



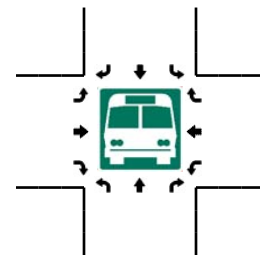
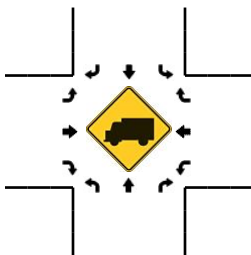
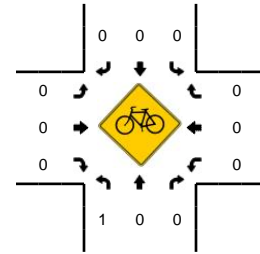
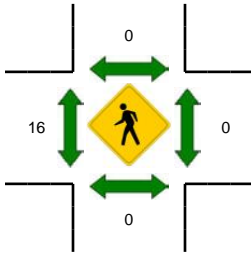
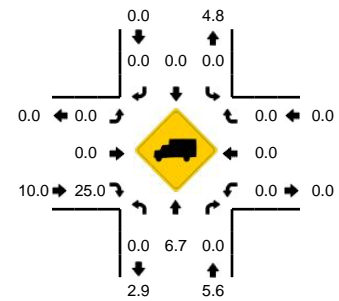
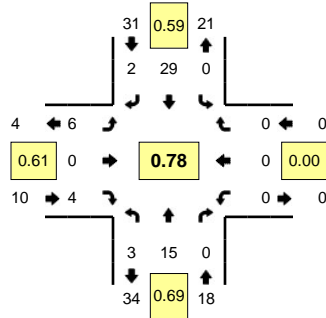
5-Min Count Period Beginning At	Narrow St (Northbound)				Narrow St (Southbound)				Harrison St (Eastbound)				Harrison St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	3	2	0	0	1	0	0	0	0	0	0	0	0	2	0	8	
6:35 AM	0	6	0	0	2	3	0	0	0	0	0	0	0	0	0	0	11	
6:40 AM	0	3	0	0	2	1	1	0	0	0	0	0	0	0	1	0	8	
6:45 AM	0	5	1	0	2	2	0	0	0	0	0	0	1	0	0	0	11	
6:50 AM	0	1	0	0	1	2	1	0	0	1	0	0	0	0	0	0	6	
6:55 AM	0	5	1	0	2	0	0	0	0	0	0	0	0	0	0	0	8	
7:00 AM	0	9	0	0	1	0	0	0	0	0	1	0	0	0	2	0	13	
7:05 AM	0	3	0	0	0	8	1	0	0	1	1	0	0	0	0	0	14	
7:10 AM	0	4	1	0	0	5	0	0	0	0	0	0	0	0	0	0	10	
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:20 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
7:25 AM	0	5	0	0	0	1	0	0	0	0	0	0	2	0	0	0	8	105
7:30 AM	0	6	0	0	1	4	0	0	0	0	0	0	0	0	0	0	11	108
7:35 AM	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	0	13	110
7:40 AM	0	4	1	0	0	0	0	0	1	0	0	0	0	0	0	0	6	108
7:45 AM	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	6	103
7:50 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	101
7:55 AM	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	4	97
8:00 AM	0	1	0	0	1	1	0	0	0	0	0	0	1	0	2	0	6	90
8:05 AM	0	1	1	0	0	5	0	0	0	0	1	0	0	1	0	0	9	85
8:10 AM	0	2	0	0	1	6	0	0	0	0	0	0	0	0	0	0	9	84
8:15 AM	0	1	0	0	1	3	0	0	0	0	0	0	0	0	0	0	5	88
8:20 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	83
8:25 AM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	78
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	64	4	0	4	52	4	0	0	4	8	0	0	0	8	0	148	
Heavy Trucks	0	12	0		0	8	0		0	0	0		0	0	0		20	
Pedestrians	0				4				16				8				28	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Cherry Ave -- Harrison St
CITY/STATE: Sumner, WA

QC JOB #: 10553208
DATE: 11/3/2010

Peak-Hour: 6:55 AM -- 7:55 AM
Peak 15-Min: 7:40 AM -- 7:55 AM



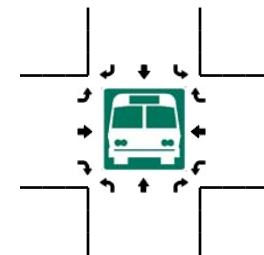
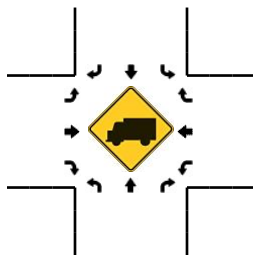
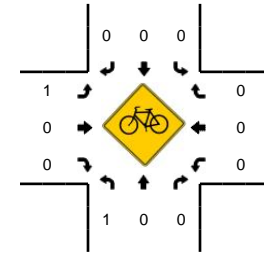
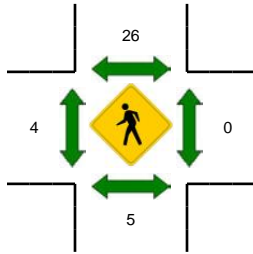
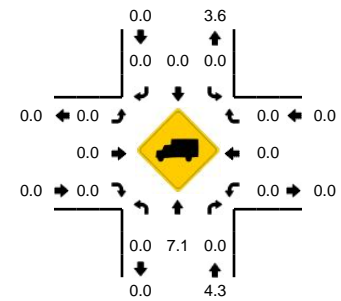
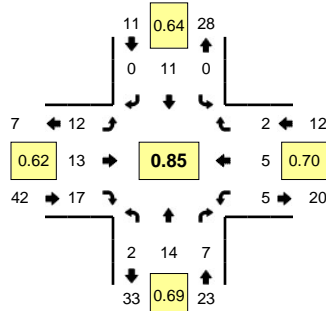
5-Min Count Period Beginning At	Cherry Ave (Northbound)				Cherry Ave (Southbound)				Harrison St (Eastbound)				Harrison St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	2	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	7	
6:35 AM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	4	
6:40 AM	2	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0	6	
6:45 AM	1	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	
6:50 AM	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4	
6:55 AM	1	2	0	0	0	1	0	0	0	0	2	0	0	0	0	0	6	
7:00 AM	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	
7:05 AM	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	4	
7:10 AM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	
7:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
7:20 AM	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	5	
7:25 AM	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	54
7:30 AM	0	2	0	0	0	3	0	0	1	0	0	0	0	0	0	0	6	53
7:35 AM	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6	55
7:40 AM	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	4	53
7:45 AM	1	3	0	0	0	1	1	0	1	0	1	0	0	0	0	0	8	56
7:50 AM	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	7	59
7:55 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	54
8:00 AM	1	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0	5	56
8:05 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	54
8:10 AM	0	2	0	0	0	1	0	0	1	0	1	0	0	0	0	0	5	56
8:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	56
8:20 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	54
8:25 AM	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	5	54
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	4	20	0	0	0	36	4	0	8	0	4	0	0	0	0	0	76	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
Bicycles	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Cherry Ave -- Academy St
CITY/STATE: Sumner, WA

QC JOB #: 10553209
DATE: 11/3/2010

Peak-Hour: 6:55 AM -- 7:55 AM
Peak 15-Min: 7:25 AM -- 7:40 AM



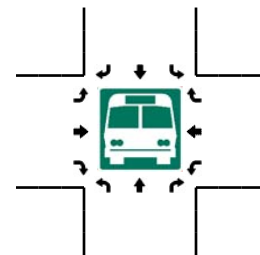
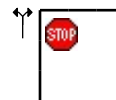
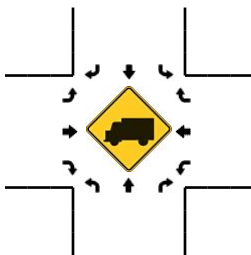
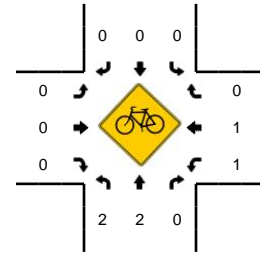
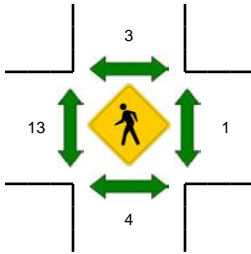
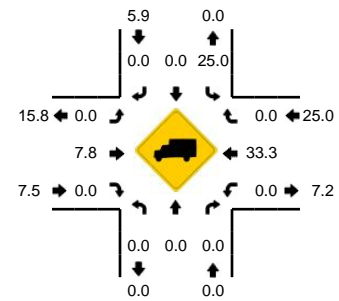
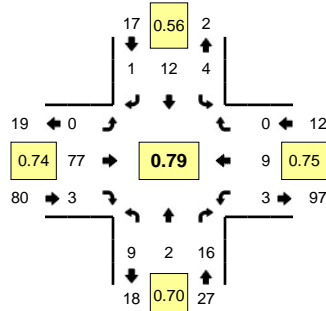
5-Min Count Period Beginning At	Cherry Ave (Northbound)				Cherry Ave (Southbound)				Academy St (Eastbound)				Academy St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	2	0	2	0	0	0	0	0	1	3	0	0	1	2	0	0	11	
6:35 AM	0	0	0	0	0	2	0	0	2	5	0	0	0	1	0	0	10	
6:40 AM	0	2	0	0	0	1	0	0	1	1	0	0	0	0	0	0	5	
6:45 AM	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	3	
6:50 AM	1	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	5	
6:55 AM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	
7:00 AM	1	0	2	0	0	0	0	0	1	2	1	0	0	2	0	0	9	
7:05 AM	0	1	1	0	0	1	0	0	2	2	2	0	0	0	0	0	9	
7:10 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	
7:15 AM	0	1	1	0	0	1	0	0	2	1	0	0	0	0	2	0	8	
7:20 AM	0	2	1	0	0	0	0	0	0	0	0	0	1	1	0	0	5	
7:25 AM	0	0	0	0	0	0	0	0	2	1	3	0	1	0	0	0	7	77
7:30 AM	0	2	1	0	0	1	0	0	1	2	2	0	2	0	0	0	11	77
7:35 AM	0	0	0	0	0	1	0	0	0	1	5	0	0	1	0	0	8	75
7:40 AM	0	1	0	0	0	0	0	0	1	2	2	0	0	0	0	0	6	76
7:45 AM	0	4	0	0	0	2	0	0	2	1	0	0	1	1	0	0	11	84
7:50 AM	1	1	0	0	0	5	0	0	1	0	1	0	0	0	0	0	9	88
7:55 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	87
8:00 AM	0	2	0	0	0	2	0	0	0	1	0	0	1	1	0	0	7	85
8:05 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	4	80
8:10 AM	0	3	0	0	0	0	0	0	1	0	1	0	0	1	0	0	6	84
8:15 AM	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0	0	5	81
8:20 AM	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	4	80
8:25 AM	1	1	1	0	0	2	1	0	2	0	0	0	0	0	0	0	8	81
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	0	8	4	0	0	8	0	0	12	16	40	0	12	4	0	0	104	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	36	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Cherry Ave -- Maple St
CITY/STATE: Sumner, WA

QC JOB #: 10553210
DATE: 11/3/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM



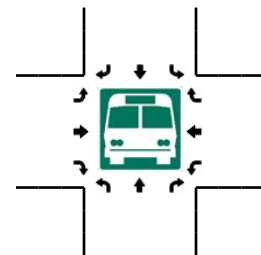
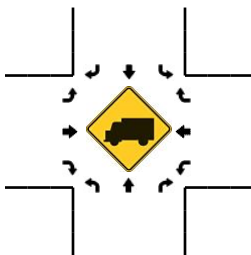
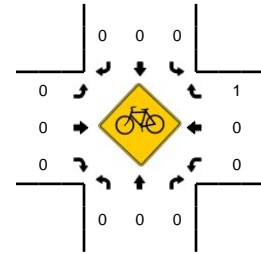
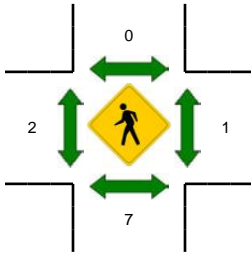
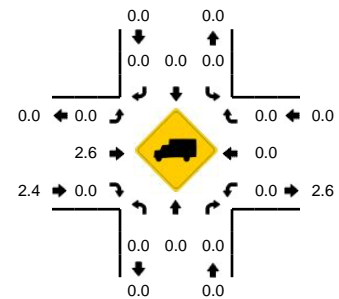
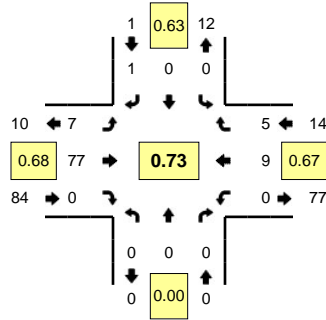
5-Min Count Period Beginning At	Cherry Ave (Northbound)				Cherry Ave (Southbound)				Maple St (Eastbound)				Maple St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	1	0	1	0	1	1	0	0	0	9	2	0	0	1	0	0	16	95
6:35 AM	2	0	2	0	0	0	0	0	0	5	1	0	0	0	0	0	10	
6:40 AM	0	0	2	0	1	0	0	0	1	6	0	0	0	0	0	0	10	
6:45 AM	2	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	4	
6:50 AM	1	0	0	0	0	0	1	0	0	5	0	0	0	0	0	0	7	
6:55 AM	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	4	
7:00 AM	0	0	3	0	0	1	0	0	0	4	0	0	0	2	0	0	10	
7:05 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	
7:10 AM	2	0	2	0	0	0	0	0	0	5	0	0	0	0	0	0	9	
7:15 AM	0	0	2	0	0	0	0	0	0	4	0	0	0	0	0	0	6	
7:20 AM	1	0	0	0	0	0	1	0	0	3	0	0	0	1	0	0	6	112
7:25 AM	0	0	3	0	1	0	1	0	0	0	1	0	0	1	0	0	7	
7:30 AM	0	0	0	0	0	1	0	0	0	7	0	0	0	1	0	0	9	
7:35 AM	0	0	2	0	1	0	0	0	0	8	0	0	0	0	0	0	11	
7:40 AM	3	0	2	0	0	2	1	0	0	2	0	0	0	0	0	0	10	
7:45 AM	1	0	2	0	1	3	0	0	0	3	1	0	0	1	1	0	13	
7:50 AM	1	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	10	
7:55 AM	1	0	1	0	0	2	0	0	0	8	0	0	0	2	0	0	14	
8:00 AM	0	0	0	0	1	0	0	0	0	5	2	0	0	0	0	0	8	
8:05 AM	0	0	3	0	0	0	0	0	0	5	0	0	0	1	1	0	10	
8:10 AM	0	0	2	0	0	1	0	0	0	3	0	0	0	2	0	0	8	136
8:15 AM	2	1	1	0	1	1	0	0	0	8	0	0	0	0	0	0	14	
8:20 AM	1	1	1	0	0	1	0	0	0	12	0	0	0	1	1	0	18	
8:25 AM	0	0	2	0	0	1	0	0	0	7	0	0	0	1	0	0	11	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	8	16	0	4	12	0	0	0	108	0	0	4	8	0	0	172	
Heavy Trucks	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	
Pedestrians		4				4				12				0			20	
Bicycles	0	2	0		0	0	0		0	0	0		0	0	0		2	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: North Lot Dwy -- Maple St
CITY/STATE: Sumner, WA

QC JOB #: 10553211
DATE: 11/3/2010

Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 7:55 AM -- 8:10 AM



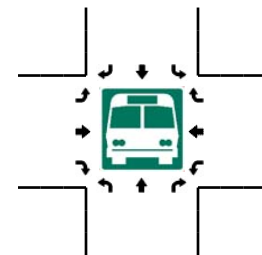
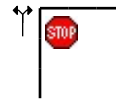
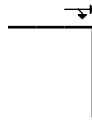
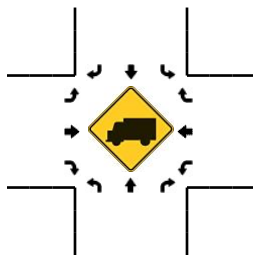
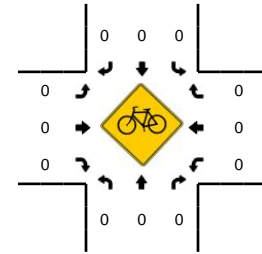
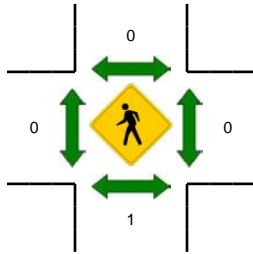
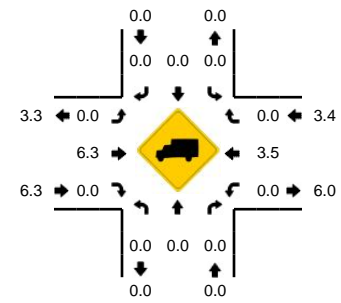
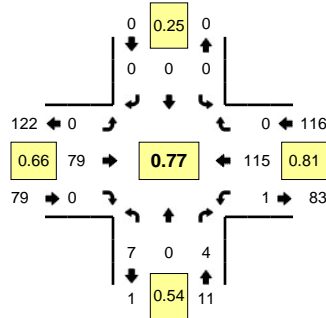
5-Min Count Period Beginning At	North Lot Dwy (Northbound)				North Lot Dwy (Southbound)				Maple St (Eastbound)				Maple St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	2	0	0	5	
6:35 AM	0	0	0	0	2	0	0	0	0	14	0	0	0	2	0	0	18	
6:40 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	
6:45 AM	0	0	0	0	0	0	0	0	1	6	0	0	0	1	0	0	8	
6:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	
6:55 AM	0	0	0	0	0	0	0	0	1	7	0	0	0	2	0	0	10	
7:00 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4	
7:05 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
7:10 AM	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	7	
7:15 AM	0	0	0	0	0	0	1	0	0	4	0	0	0	2	0	0	7	
7:20 AM	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	7	
7:25 AM	0	0	0	0	0	0	1	0	1	7	0	0	0	3	0	0	12	88
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	84
7:35 AM	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	6	72
7:40 AM	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	6	75
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	6	73
7:50 AM	0	0	0	0	0	0	0	0	2	4	0	0	0	0	1	0	7	77
7:55 AM	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13	80
8:00 AM	0	0	0	0	0	0	0	0	1	9	0	0	0	2	1	0	13	89
8:05 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	93
8:10 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7	93
8:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	89
8:20 AM	0	0	0	0	0	0	0	0	1	14	0	0	0	2	0	0	17	99
8:25 AM	0	0	0	0	1	0	0	0	0	8	0	0	0	3	0	0	12	99
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	4	120	0	0	0	8	4	0	136	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments: Optional 3

LOCATION: Main St -- North Lot Dwy
CITY/STATE: Sumner, WA

QC JOB #: 10553212
DATE: 11/11/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:50 AM -- 8:05 AM



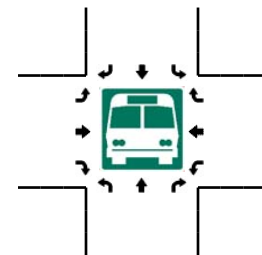
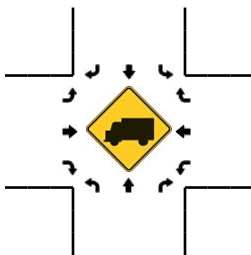
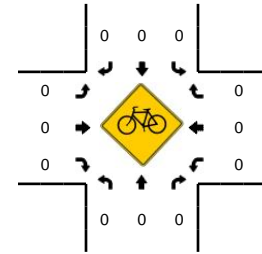
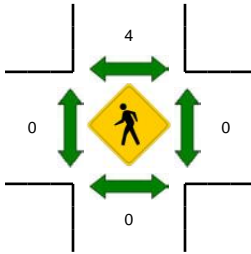
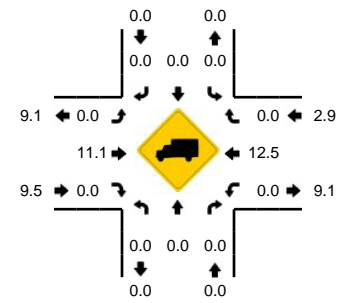
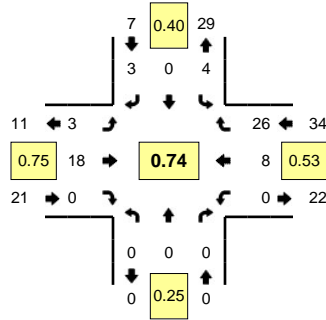
5-Min Count Period Beginning At	Main St (Northbound)				Main St (Southbound)				North Lot Dwy (Eastbound)				North Lot Dwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7	
6:35 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	11	0	0	13	
6:40 AM	0	0	0	0	0	0	0	0	0	3	1	0	2	11	0	0	17	
6:45 AM	2	0	0	0	0	0	0	0	0	2	0	0	0	10	0	0	14	
6:50 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	11	0	0	15	
6:55 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	9	0	0	13	
7:00 AM	0	0	0	0	0	1	0	0	0	5	0	0	1	11	0	0	18	
7:05 AM	1	0	1	0	0	0	0	0	0	2	0	0	0	6	0	0	10	
7:10 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	9	0	0	14	
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	8	0	0	9	
7:20 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	8	0	0	15	
7:25 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	8	153
7:30 AM	2	0	0	0	0	0	0	0	0	5	0	0	0	9	0	0	16	162
7:35 AM	1	0	2	0	0	0	0	0	0	6	0	0	1	7	0	0	17	166
7:40 AM	1	0	0	0	0	0	0	0	0	5	0	0	0	11	0	0	17	166
7:45 AM	1	0	0	0	0	0	0	0	0	9	0	0	0	10	0	0	20	172
7:50 AM	1	0	1	0	0	0	0	0	0	5	0	0	0	15	0	0	22	179
7:55 AM	0	0	1	0	0	0	0	0	0	11	0	0	0	9	0	0	21	187
8:00 AM	0	0	0	0	0	0	0	0	0	14	0	0	0	10	0	0	24	193
8:05 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	0	10	193
8:10 AM	1	0	0	0	0	0	0	0	0	5	0	0	0	9	0	0	15	194
8:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	8	0	0	14	199
8:20 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11	195
8:25 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	16	0	0	19	206
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	0	8	0	0	0	0	0	0	120	0	0	0	136	0	0	268	
Heavy Trucks	0	0	0	0	0	0	0	0	0	8	0	0	0	4	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments: Optional 4

LOCATION: Off Site Dwy -- State St
CITY/STATE: Sumner, WA

QC JOB #: 10553213
DATE: 11/3/2010

Peak-Hour: 6:30 AM -- 7:30 AM
Peak 15-Min: 6:45 AM -- 7:00 AM



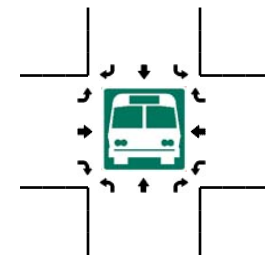
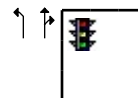
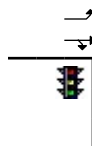
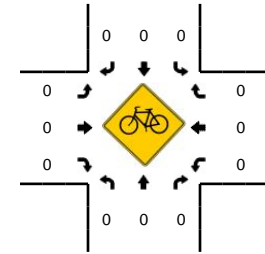
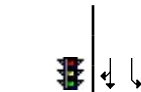
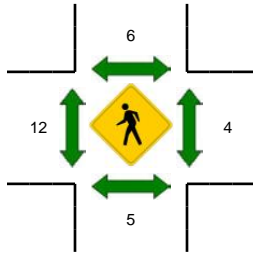
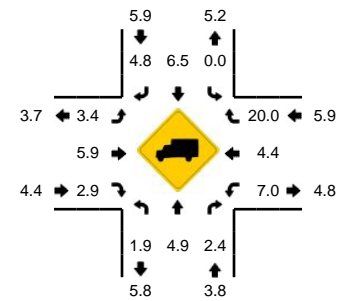
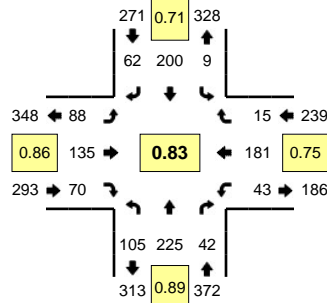
5-Min Count Period Beginning At	Off Site Dwy (Northbound)				Off Site Dwy (Southbound)				State St (Eastbound)				State St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	2	0	5	
6:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
6:40 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0	4	
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3	
6:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	
6:55 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	3	6	0	12	
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
7:05 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	1	1	5	
7:10 AM	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	1	6	
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	3	
7:20 AM	0	0	0	0	2	0	1	0	0	3	0	0	0	0	3	0	9	
7:25 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	0	1	1	6	62
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	1	5	62
7:35 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	62
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3	58
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	54
7:55 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	44
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	45
8:05 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	5	45
8:10 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	41
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
8:20 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	6	35
8:25 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	30
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	4	12	0	0	0	12	56	0	84	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments: Optional 5

LOCATION: 4th St NW/5th St NW -- W Stewart Ave
CITY/STATE: Puyallup, WA

QC JOB #: 10553214
DATE: 11/2/2010

Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:30 AM -- 7:45 AM



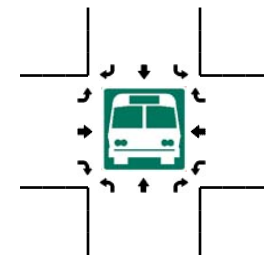
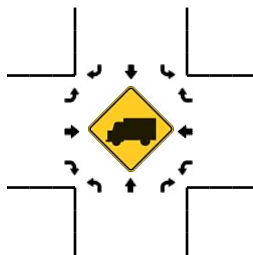
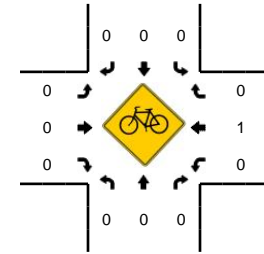
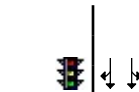
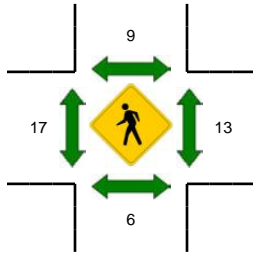
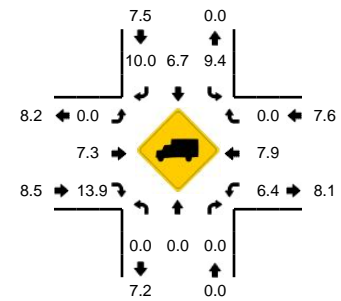
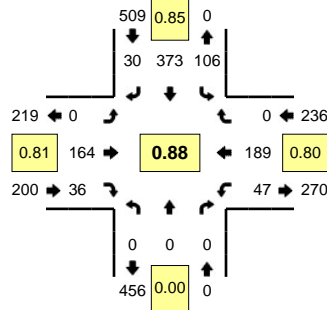
5-Min Count Period Beginning At	4th St NW/5th St NW (Northbound)				4th St NW/5th St NW (Southbound)				W Stewart Ave (Eastbound)				W Stewart Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	5	17	2	0	1	10	0	0	3	10	7	0	0	0	0	0	55	
6:35 AM	4	23	4	0	0	10	0	0	3	5	3	0	2	4	0	0	58	
6:40 AM	3	24	4	0	0	4	1	0	3	7	5	0	1	6	0	0	58	
6:45 AM	6	25	3	0	2	8	2	0	3	12	8	0	1	7	0	0	77	
6:50 AM	6	16	2	0	0	10	1	0	4	11	2	0	1	6	0	0	59	
6:55 AM	11	13	2	0	0	11	2	0	3	7	5	0	2	6	1	0	63	
7:00 AM	3	22	1	0	0	4	1	0	5	2	3	0	0	7	0	0	48	
7:05 AM	6	16	1	0	1	7	6	0	2	3	3	0	2	6	2	0	55	
7:10 AM	7	17	3	0	0	10	2	0	5	12	7	0	1	10	3	0	77	
7:15 AM	9	16	2	0	0	11	6	0	5	5	5	0	7	17	0	0	83	
7:20 AM	4	22	2	0	0	12	9	0	14	10	7	0	7	22	0	0	109	
7:25 AM	9	20	2	0	0	25	13	0	6	7	5	0	3	10	0	0	100	842
7:30 AM	6	23	2	0	0	22	7	0	6	16	4	0	5	17	5	0	113	900
7:35 AM	6	23	3	0	0	25	5	0	10	12	8	0	8	26	1	0	127	969
7:40 AM	12	21	3	0	0	23	3	0	12	15	6	0	4	14	0	0	113	1024
7:45 AM	16	16	7	0	0	16	5	0	6	10	7	0	1	18	2	0	104	1051
7:50 AM	9	15	4	0	4	19	3	0	8	12	5	0	2	12	2	0	95	1087
7:55 AM	9	21	5	0	0	12	3	0	8	16	5	0	2	14	1	0	96	1120
8:00 AM	6	16	5	0	2	12	4	0	3	11	5	0	2	11	0	0	77	1149
8:05 AM	12	15	4	0	3	13	2	0	5	9	6	0	1	10	1	0	81	1175
8:10 AM	6	25	2	0	1	12	2	0	7	8	5	0	0	4	0	0	72	1170
8:15 AM	7	18	3	0	3	11	1	0	11	16	5	0	3	8	2	0	88	1175
8:20 AM	7	11	7	0	0	8	1	0	2	13	6	0	2	12	2	0	71	1137
8:25 AM	7	17	4	0	1	23	1	0	4	11	7	0	1	8	3	0	87	1124
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	96	268	32	0	0	280	60	0	112	172	72	0	68	228	24	0	1412	
Heavy Trucks	0	4	0	0	0	24	0	0	8	8	4	0	12	8	0	0	68	
Pedestrians	0	0	0	0	0	16	0	0	0	16	0	0	0	4	0	0	36	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

LOCATION: N Meridian St -- W Stewart Ave
CITY/STATE: Puyallup, WA

QC JOB #: 10553215
DATE: 11/2/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



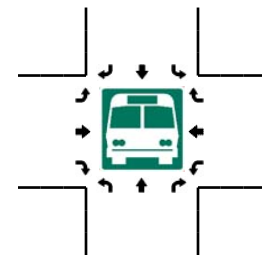
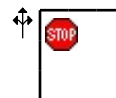
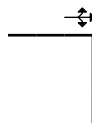
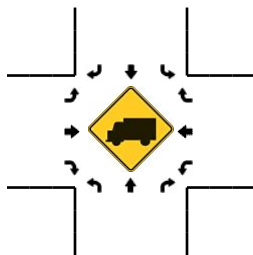
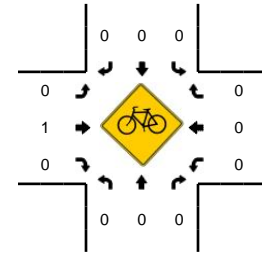
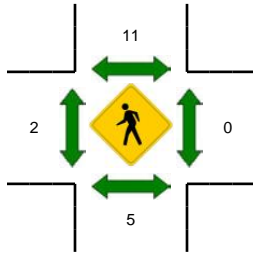
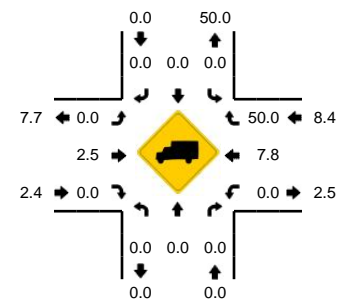
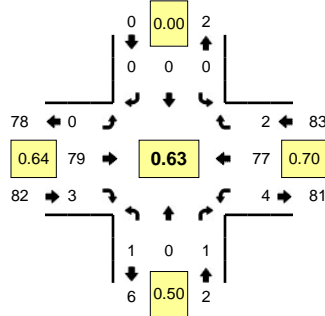
5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				W Stewart Ave (Eastbound)				W Stewart Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	4	20	0	0	0	10	1	0	2	1	0	0	38	
6:35 AM	0	0	0	0	4	19	1	0	0	6	1	0	2	7	0	0	40	
6:40 AM	0	0	0	0	8	13	2	0	0	7	2	0	3	7	0	0	42	
6:45 AM	0	0	0	0	4	21	1	0	0	14	1	0	4	9	0	0	54	
6:50 AM	0	0	0	0	5	17	0	0	0	13	2	0	1	10	0	0	48	
6:55 AM	0	0	0	0	7	19	2	0	0	9	2	0	4	12	0	0	55	
7:00 AM	0	0	0	0	1	19	0	0	0	2	0	0	2	7	0	0	31	
7:05 AM	0	0	0	0	9	25	0	0	0	6	0	0	2	9	0	0	51	
7:10 AM	0	0	0	0	3	16	1	0	0	10	0	0	3	11	0	0	44	
7:15 AM	0	0	0	0	9	21	4	0	0	7	0	0	5	22	0	0	68	
7:20 AM	0	0	0	0	6	21	3	0	0	8	2	0	5	29	0	0	74	
7:25 AM	0	0	0	0	5	26	3	0	0	6	4	0	1	23	0	0	68	613
7:30 AM	0	0	0	0	6	24	4	0	0	15	1	0	2	17	0	0	69	644
7:35 AM	0	0	0	0	6	28	2	0	0	12	3	0	7	30	0	0	88	692
7:40 AM	0	0	0	0	10	35	0	0	0	16	2	0	1	15	0	0	79	729
7:45 AM	0	0	0	0	6	37	4	0	0	12	3	0	1	24	0	0	87	762
7:50 AM	0	0	0	0	5	40	3	0	0	14	3	0	11	13	0	0	89	803
7:55 AM	0	0	0	0	13	35	5	0	0	17	1	0	3	19	0	0	93	841
8:00 AM	0	0	0	0	17	28	3	0	0	10	3	0	2	16	0	0	79	889
8:05 AM	0	0	0	0	7	34	0	0	0	9	5	0	3	9	0	0	67	905
8:10 AM	0	0	0	0	7	29	0	0	0	10	2	0	3	7	0	0	58	919
8:15 AM	0	0	0	0	10	27	3	0	0	17	3	0	8	10	0	0	78	929
8:20 AM	0	0	0	0	9	27	2	0	0	18	5	0	3	16	0	0	80	935
8:25 AM	0	0	0	0	10	29	4	0	0	14	5	0	3	13	0	0	78	945
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	96	448	48	0	0	172	28	0	60	224	0	0	1076	
Heavy Trucks	0	0	0	0	8	32	4	0	0	0	8	0	8	20	0	0	80	
Pedestrians	0	0	0	0	8	4	0	0	0	4	0	0	0	16	0	0	32	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

LOCATION: 4th St SW -- W Main Ave
CITY/STATE: Puyallup, WA

QC JOB #: 10553216
DATE: 11/2/2010

Peak-Hour: 6:55 AM -- 7:55 AM
Peak 15-Min: 7:20 AM -- 7:35 AM



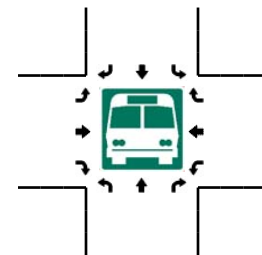
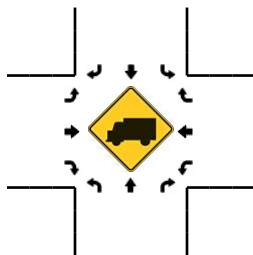
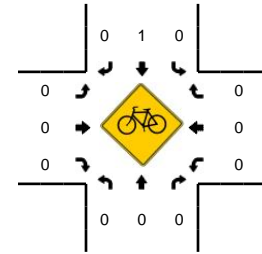
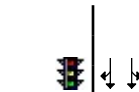
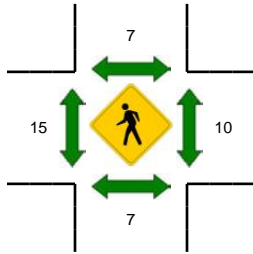
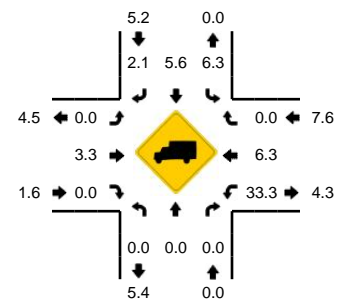
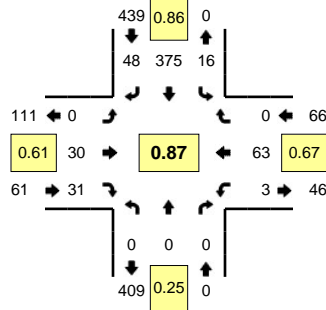
5-Min Count Period Beginning At	4th St SW (Northbound)				4th St SW (Southbound)				W Main Ave (Eastbound)				W Main Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	0	6	1	0	1	4	0	0	12	
6:35 AM	1	0	0	0	0	0	0	0	0	2	0	0	1	9	0	0	13	
6:40 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	5	0	0	8	
6:45 AM	0	1	0	0	0	0	0	0	1	2	0	0	0	5	0	0	9	
6:50 AM	0	1	0	0	0	0	0	0	1	6	1	0	0	4	0	0	13	
6:55 AM	0	0	0	0	0	0	0	0	0	9	0	0	0	7	1	0	17	
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	11	0	0	14	
7:05 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0	0	5	
7:10 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	6	
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5	
7:20 AM	1	0	0	0	0	0	0	0	0	7	0	0	1	7	0	1	17	
7:25 AM	0	0	0	0	0	0	0	0	0	13	0	0	1	9	0	0	23	142
7:30 AM	0	0	0	0	0	0	0	0	0	14	1	0	0	11	0	0	26	156
7:35 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8	151
7:40 AM	0	0	1	0	0	0	0	0	0	11	0	0	0	6	0	0	18	161
7:45 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	5	0	0	13	165
7:50 AM	0	0	0	0	0	0	0	0	0	6	1	0	0	7	1	0	15	167
7:55 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5	155
8:00 AM	0	0	0	0	0	0	0	0	0	4	1	0	0	2	0	0	7	148
8:05 AM	1	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	12	155
8:10 AM	0	0	1	0	0	0	0	0	0	6	0	0	0	5	0	0	12	161
8:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4	160
8:20 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	0	10	153
8:25 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6	136
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	4	0	0	0	0	0	0	0	0	136	4	0	8	108	0	4	264	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	16	0	0	20	
Pedestrians	12				20				8				0				40	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: N Meridian -- W Main Ave
CITY/STATE: Puyallup, WA

QC JOB #: 10553217
DATE: 11/2/2010

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:40 AM -- 7:55 AM



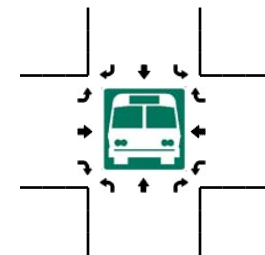
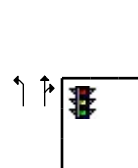
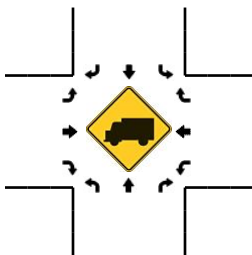
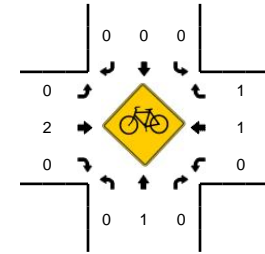
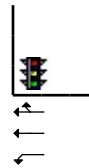
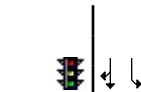
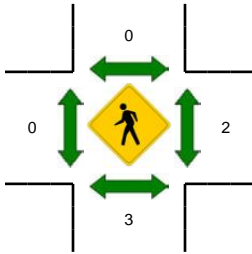
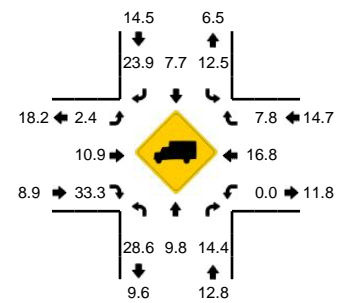
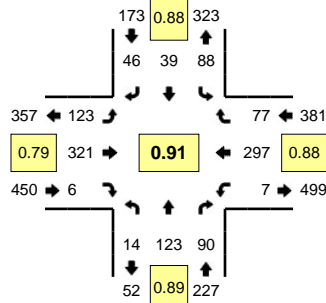
5-Min Count Period Beginning At	N Meridian (Northbound)				N Meridian (Southbound)				W Main Ave (Eastbound)				W Main Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	2	21	0	0	0	3	1	0	0	7	0	0	34	
6:35 AM	0	0	0	0	0	9	1	0	0	1	8	0	0	4	0	0	23	
6:40 AM	0	0	0	0	1	26	4	0	0	2	1	0	0	3	0	0	37	
6:45 AM	0	0	0	0	1	19	4	0	0	2	1	0	0	2	0	0	29	
6:50 AM	0	0	0	0	1	17	1	0	0	4	1	0	1	2	0	0	27	
6:55 AM	0	0	0	0	1	23	1	0	0	2	6	0	0	9	0	0	42	
7:00 AM	0	0	0	0	0	12	0	0	0	1	5	0	0	3	0	0	21	
7:05 AM	0	0	0	0	0	36	1	0	0	0	3	0	0	0	0	0	40	
7:10 AM	0	0	1	0	0	13	5	0	0	2	0	0	0	2	0	0	23	
7:15 AM	0	0	0	0	0	25	2	0	0	1	0	0	0	5	0	0	33	
7:20 AM	0	0	0	0	0	25	3	0	0	3	1	0	0	8	0	0	40	
7:25 AM	0	0	0	0	2	27	2	0	0	2	1	0	1	10	0	0	45	394
7:30 AM	0	0	0	0	0	16	2	0	0	5	8	0	0	7	0	0	38	398
7:35 AM	0	0	0	0	2	39	8	0	0	2	2	0	1	2	0	0	56	431
7:40 AM	0	0	0	0	0	33	5	0	0	6	4	0	0	4	0	0	52	446
7:45 AM	0	0	0	0	1	35	4	0	0	4	3	0	0	6	0	0	53	470
7:50 AM	0	0	0	0	3	43	4	0	0	1	0	0	0	7	0	0	58	501
7:55 AM	0	0	0	0	1	35	6	0	0	1	0	0	1	8	0	0	52	511
8:00 AM	0	0	0	0	1	28	2	0	0	3	3	0	0	4	0	0	41	531
8:05 AM	0	0	0	0	2	39	1	0	0	1	5	0	0	4	0	0	52	543
8:10 AM	0	0	0	0	1	22	5	0	0	0	2	0	0	1	0	0	31	551
8:15 AM	0	0	0	0	3	33	6	0	0	2	2	0	0	2	0	0	48	566
8:20 AM	0	0	0	0	0	25	8	0	0	1	2	0	0	1	0	0	37	563
8:25 AM	0	0	0	0	0	34	6	0	0	2	2	0	1	1	0	0	46	564
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	16	444	52	0	0	44	28	0	0	68	0	0	652	
Heavy Trucks	0	0	0	0	0	24	4	0	0	0	0	0	0	4	0	0	32	
Pedestrians		8				8				16				4			36	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: E D St -- Puyallup Ave
CITY/STATE: Tacoma, WA

QC JOB #: 10553218
DATE: 11/4/2010

Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:50 AM -- 8:05 AM



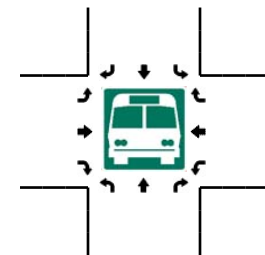
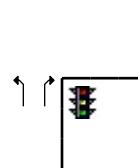
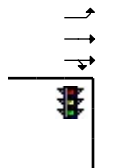
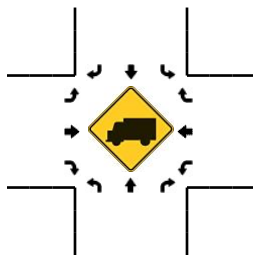
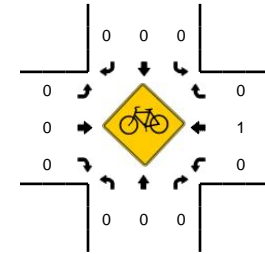
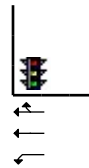
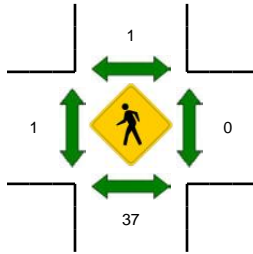
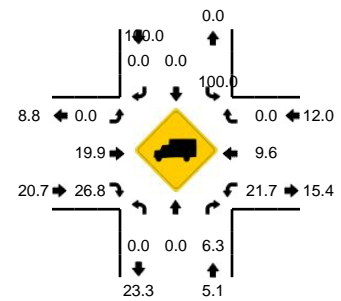
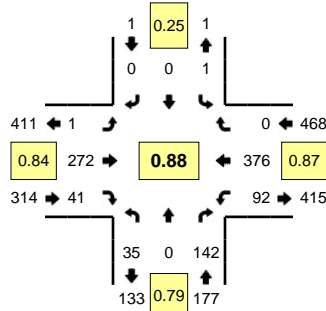
5-Min Count Period Beginning At	E D St (Northbound)				E D St (Southbound)				Puyallup Ave (Eastbound)				Puyallup Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	7	7	0	4	2	2	0	15	28	0	0	0	14	8	0	87	
6:35 AM	1	6	9	0	11	0	4	0	12	27	1	0	0	14	10	0	95	
6:40 AM	0	11	10	0	9	0	1	0	18	36	3	0	1	10	11	0	110	
6:45 AM	0	18	7	0	7	2	3	0	18	25	1	0	0	10	14	0	105	
6:50 AM	0	11	3	0	8	1	4	0	17	33	0	0	1	17	13	0	108	
6:55 AM	0	16	8	0	8	3	2	0	12	33	2	0	1	10	6	0	101	
7:00 AM	3	9	11	0	9	2	1	0	8	23	1	0	2	15	9	0	93	
7:05 AM	1	8	6	0	10	4	5	0	7	17	1	0	0	14	4	0	77	
7:10 AM	0	8	7	0	9	4	4	0	9	37	0	0	0	13	2	0	93	
7:15 AM	1	10	10	0	6	0	3	0	2	20	0	0	0	21	5	0	78	
7:20 AM	1	9	7	0	7	4	8	0	10	26	1	0	1	21	7	0	102	
7:25 AM	1	13	7	0	7	2	4	0	15	21	0	0	1	20	4	0	95	1144
7:30 AM	2	16	7	0	8	4	4	0	8	29	1	0	0	28	6	0	113	1170
7:35 AM	0	9	4	0	9	3	3	0	7	30	0	0	2	34	10	0	111	1186
7:40 AM	5	16	9	0	8	2	0	0	6	23	0	0	0	21	6	0	96	1172
7:45 AM	0	8	8	0	3	1	1	0	11	28	1	0	0	30	6	0	97	1164
7:50 AM	0	12	6	0	6	7	6	0	11	32	2	0	1	32	6	0	121	1177
7:55 AM	1	6	12	0	6	7	2	0	16	26	0	0	0	30	10	0	116	1192
8:00 AM	2	9	12	0	7	4	5	0	13	20	1	0	2	19	9	0	103	1202
8:05 AM	1	7	1	0	12	1	6	0	15	29	0	0	0	28	6	0	106	1231
8:10 AM	3	6	0	0	6	2	5	0	5	23	0	0	0	24	8	0	82	1220
8:15 AM	0	7	5	0	5	6	4	0	2	19	0	0	0	21	5	0	74	1216
8:20 AM	1	6	3	0	7	2	3	0	14	10	1	0	1	23	7	0	78	1192
8:25 AM	2	6	4	0	5	1	4	0	6	12	2	0	2	19	8	0	71	1168
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	12	108	120	0	76	72	52	0	160	312	12	0	12	324	100	0	1360	
Heavy Trucks	0	8	16		16	4	16		0	32	4		0	28	0		124	
Pedestrians	0				0				0				0	4			4	
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: E G St -- Puyallup Ave
CITY/STATE: Tacoma, WA

QC JOB #: 10553219
DATE: 11/4/2010

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:35 AM -- 7:50 AM



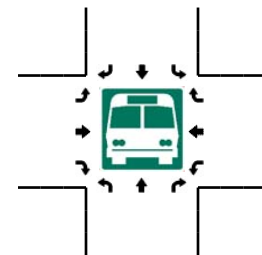
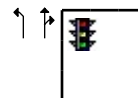
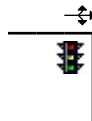
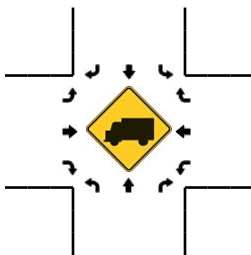
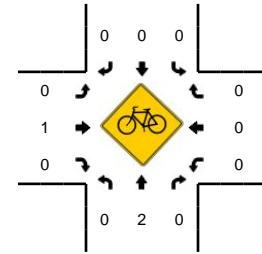
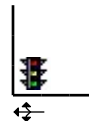
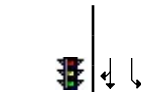
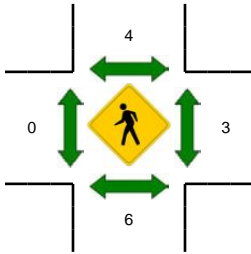
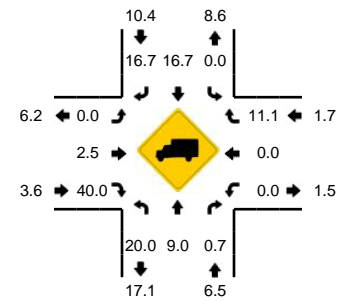
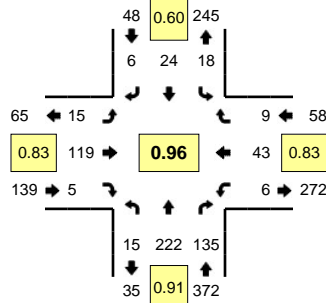
5-Min Count Period Beginning At	E G St (Northbound)				E G St (Southbound)				Puyallup Ave (Eastbound)				Puyallup Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	3	0	7	0	0	0	0	0	0	19	5	0	5	19	0	0	58	
6:35 AM	2	0	7	0	0	0	0	0	0	13	6	0	11	15	0	0	54	
6:40 AM	4	0	11	0	0	0	0	0	0	15	5	0	8	20	0	0	63	
6:45 AM	4	0	11	0	0	0	0	0	0	16	5	0	9	29	0	0	74	
6:50 AM	3	0	8	0	0	0	0	0	0	19	7	0	6	20	0	0	63	
6:55 AM	1	0	9	0	0	0	0	0	0	19	9	0	10	21	0	0	69	
7:00 AM	1	0	7	0	0	0	0	0	0	12	5	0	12	25	0	0	62	
7:05 AM	6	0	5	0	0	0	0	0	0	15	3	0	13	16	0	0	58	
7:10 AM	2	0	10	0	0	0	0	0	0	18	5	0	5	16	0	0	56	
7:15 AM	2	0	6	0	0	0	0	0	0	15	4	0	5	27	0	0	59	
7:20 AM	3	0	12	0	0	0	0	0	0	22	3	0	9	32	0	0	81	
7:25 AM	6	0	11	0	0	0	0	0	0	14	4	0	5	22	0	0	62	759
7:30 AM	1	0	7	0	0	0	0	0	0	23	3	0	4	35	0	0	73	774
7:35 AM	3	0	14	0	0	0	0	0	0	22	2	0	10	38	0	0	89	809
7:40 AM	0	0	26	0	0	0	0	0	1	25	5	0	9	26	0	0	92	838
7:45 AM	2	0	12	0	0	0	0	0	0	20	6	0	12	39	0	0	91	855
7:50 AM	3	0	13	0	1	0	0	0	0	25	3	0	6	35	0	0	86	878
7:55 AM	8	0	9	0	0	0	0	0	0	27	5	0	3	34	0	0	86	895
8:00 AM	2	0	10	0	0	0	0	0	0	27	4	0	8	27	0	0	78	911
8:05 AM	4	0	14	0	0	0	0	0	0	29	1	0	8	28	0	0	84	937
8:10 AM	1	0	10	0	0	0	0	0	0	20	2	0	8	36	0	0	77	958
8:15 AM	2	0	4	0	0	0	0	0	0	18	3	0	10	24	0	0	61	960
8:20 AM	2	0	7	0	0	0	0	0	0	21	3	0	3	28	0	0	64	943
8:25 AM	2	0	6	0	0	0	0	0	0	13	1	0	6	25	0	0	53	934
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	20	0	208	0	0	0	0	0	4	268	52	0	124	412	0	0	1088	
Heavy Trucks	0	0	8	0	0	0	0	0	0	60	16	0	24	56	0	0	164	
Pedestrians		24				4				4				0			32	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: E D St -- E 25th St
CITY/STATE: Tacoma, WA

QC JOB #: 10553220
DATE: 11/4/2010

Peak-Hour: 6:35 AM -- 7:35 AM
Peak 15-Min: 6:45 AM -- 7:00 AM



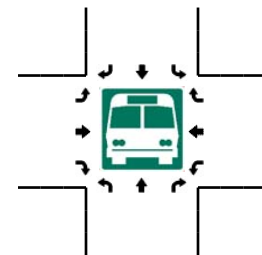
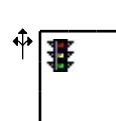
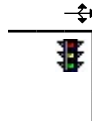
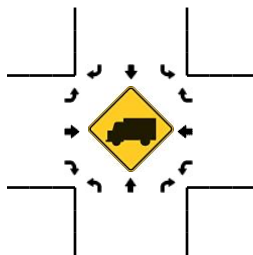
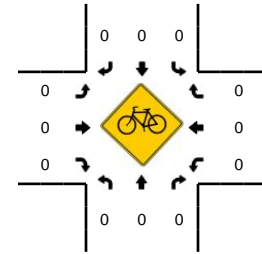
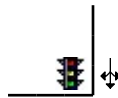
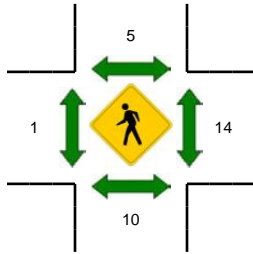
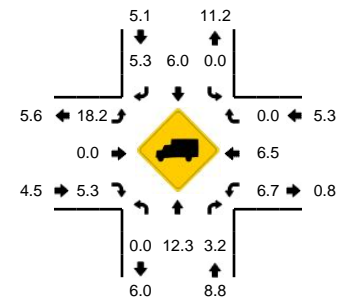
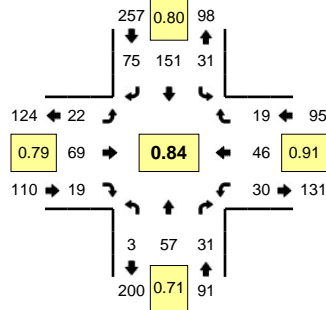
5-Min Count Period Beginning At	E D St (Northbound)				E D St (Southbound)				E 25th St (Eastbound)				E 25th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	15	14	0	3	1	0	0	0	5	2	0	0	1	0	0	41	
6:35 AM	0	17	20	0	1	1	0	0	1	8	0	1	0	2	0	0	51	
6:40 AM	1	18	17	0	3	1	0	0	1	5	1	0	0	2	1	0	50	
6:45 AM	2	21	6	0	0	3	0	0	3	11	0	0	0	4	3	0	53	
6:50 AM	3	13	17	0	2	0	0	0	0	6	1	0	0	2	0	0	44	
6:55 AM	1	23	11	0	4	2	0	0	2	13	0	0	2	5	1	0	64	
7:00 AM	0	20	4	0	1	2	2	0	2	9	0	0	0	3	1	0	44	
7:05 AM	0	15	11	0	1	3	1	0	1	10	3	0	1	3	0	0	49	
7:10 AM	4	14	10	0	1	3	0	0	1	10	0	0	1	2	1	0	47	
7:15 AM	1	21	10	0	0	0	2	0	1	16	0	0	1	6	1	0	59	
7:20 AM	0	20	8	0	2	4	1	0	0	10	0	0	0	4	0	0	49	
7:25 AM	1	17	10	0	0	2	0	0	1	11	0	0	1	7	0	0	50	601
7:30 AM	2	23	11	0	3	3	0	0	1	10	0	0	0	3	1	0	57	617
7:35 AM	0	14	7	0	2	1	0	0	1	8	0	0	0	5	0	0	38	604
7:40 AM	2	30	5	0	0	2	1	0	0	8	1	0	0	7	0	0	56	610
7:45 AM	3	14	10	0	0	2	0	0	2	11	0	0	1	4	0	0	47	604
7:50 AM	3	16	10	0	2	5	2	0	3	5	0	0	0	5	0	0	51	611
7:55 AM	3	23	7	0	1	7	0	0	1	9	1	0	0	5	0	0	57	604
8:00 AM	0	21	5	0	0	5	2	0	1	4	0	0	0	3	0	0	41	601
8:05 AM	0	5	4	0	0	1	1	0	0	7	2	0	0	2	1	0	23	575
8:10 AM	1	9	4	0	1	1	0	0	1	4	0	0	0	4	0	0	25	553
8:15 AM	0	11	3	0	0	5	0	0	1	8	1	0	0	3	0	0	32	526
8:20 AM	3	8	4	0	0	5	0	0	1	13	1	0	0	5	1	0	41	518
8:25 AM	0	13	1	0	1	1	3	0	1	7	0	0	1	6	0	0	34	502
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	24	228	136	0	24	20	0	0	20	120	4	0	8	44	16	0	644	
Heavy Trucks	4	16	4		0	4	0		0	0	0		0	0	0		28	
Pedestrians		8				4				0				4			16	
Bicycles	0	1	0		0	0	0		0	0	0		0	0	0		1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: E G St -- E 25th St
CITY/STATE: Tacoma, WA

QC JOB #: 10553221
DATE: 11/3/2010

Peak-Hour: 6:55 AM -- 7:55 AM
Peak 15-Min: 7:40 AM -- 7:55 AM



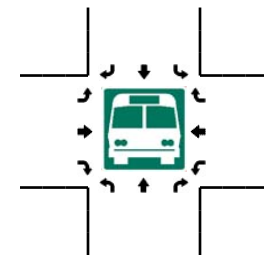
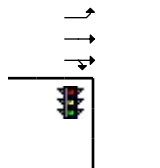
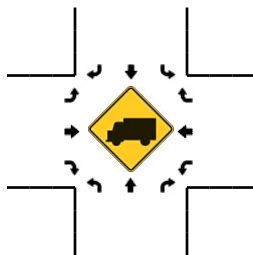
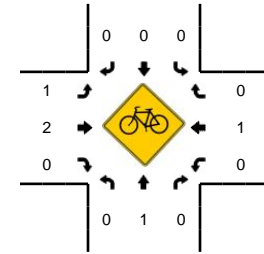
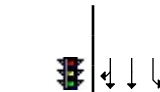
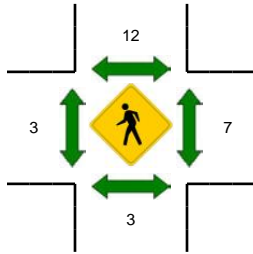
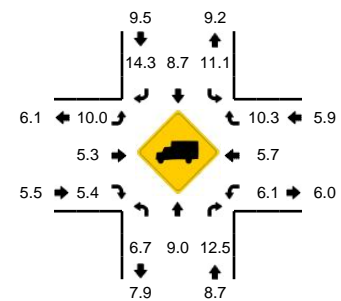
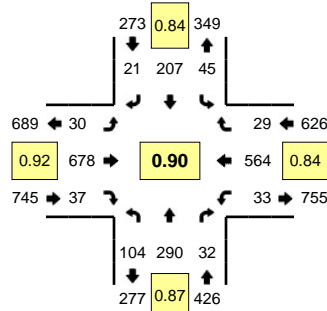
5-Min Count Period Beginning At	E G St (Northbound)				E G St (Southbound)				E 25th St (Eastbound)				E 25th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	2	4	0	5	8	2	0	1	1	1	0	1	3	1	0	29	
6:35 AM	0	4	2	0	2	16	5	0	3	2	1	0	4	2	3	0	44	
6:40 AM	0	10	3	0	1	9	4	0	1	2	2	0	2	4	2	0	40	
6:45 AM	0	3	3	0	2	14	11	0	3	3	4	0	3	1	3	0	50	
6:50 AM	0	6	2	0	4	18	7	0	0	3	1	0	2	3	0	0	46	
6:55 AM	0	7	4	0	3	10	3	0	3	6	1	0	1	4	1	0	43	
7:00 AM	0	9	5	0	0	9	7	0	2	4	0	0	2	5	2	0	45	
7:05 AM	0	6	3	0	6	6	2	0	1	6	1	0	3	5	2	0	41	
7:10 AM	0	2	3	0	1	13	6	0	1	5	0	0	2	3	1	0	37	
7:15 AM	0	0	5	0	2	6	4	0	2	6	3	0	5	4	2	0	39	
7:20 AM	1	3	3	0	1	14	9	0	5	4	2	0	1	3	1	0	47	
7:25 AM	1	4	2	0	3	14	8	0	2	6	5	0	5	2	1	0	53	514
7:30 AM	0	2	1	0	2	9	7	0	0	5	1	0	3	10	1	0	41	526
7:35 AM	0	6	2	0	3	17	5	0	1	3	1	0	0	3	2	0	43	525
7:40 AM	0	1	0	0	5	24	5	0	3	8	0	0	3	3	0	0	52	537
7:45 AM	0	9	3	0	1	16	9	0	1	9	3	0	3	2	4	0	60	547
7:50 AM	1	8	0	0	4	13	10	0	1	7	2	0	2	2	2	0	52	553
7:55 AM	1	4	0	0	2	13	10	0	3	5	0	0	2	1	1	0	42	552
8:00 AM	1	5	0	0	0	9	9	0	1	5	3	0	3	2	0	0	38	545
8:05 AM	1	7	2	0	1	17	7	0	1	1	3	0	0	6	0	0	46	550
8:10 AM	1	2	1	0	1	13	7	0	3	3	2	0	1	3	0	0	37	550
8:15 AM	0	8	0	0	0	7	3	0	2	5	1	0	2	2	0	0	30	541
8:20 AM	0	3	4	0	0	11	4	0	3	4	1	0	3	5	0	0	38	532
8:25 AM	0	2	0	0	1	4	2	0	3	5	3	0	1	1	1	0	23	502
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	4	72	12	0	40	212	96	0	20	96	20	0	32	28	24	0	656	
Heavy Trucks	0	4	0	0	0	20	12	0	4	0	0	0	4	0	0	0	44	
Pedestrians		16				8				4				28			56	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: S Tacoma Way -- S 56th St
CITY/STATE: Tacoma, WA

QC JOB #: 10553222
DATE: 11/4/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



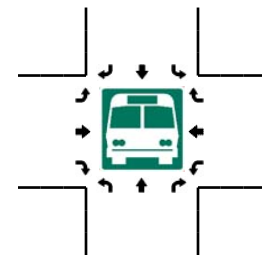
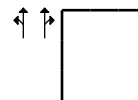
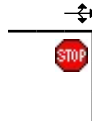
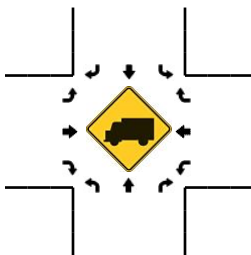
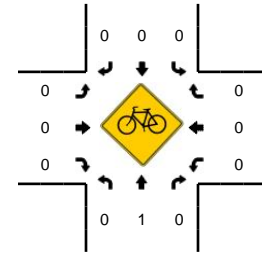
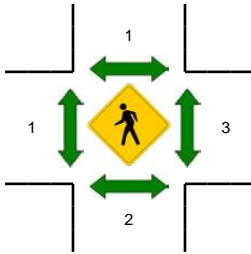
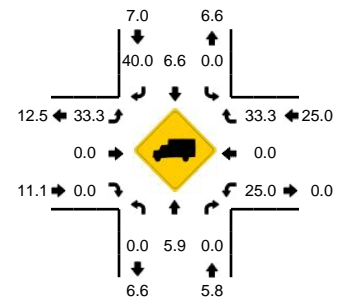
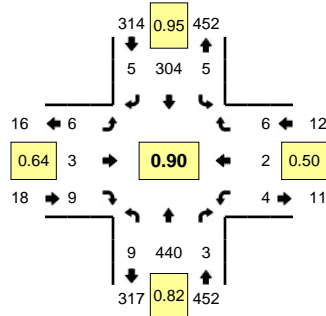
5-Min Count Period Beginning At	S Tacoma Way (Northbound)				S Tacoma Way (Southbound)				S 56th St (Eastbound)				S 56th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	1	17	1	0	0	4	0	0	3	33	1	0	0	23	3	0	86	
6:35 AM	6	14	4	0	1	5	0	0	0	51	2	0	1	30	0	0	114	
6:40 AM	6	15	0	0	2	11	0	0	0	41	0	0	4	29	1	0	109	
6:45 AM	10	11	2	0	4	8	1	0	1	41	3	0	1	28	1	0	111	
6:50 AM	5	7	1	0	1	7	0	0	1	47	0	0	1	36	1	0	107	
6:55 AM	5	25	0	0	3	8	0	0	2	31	3	0	3	42	1	0	123	
7:00 AM	8	12	3	0	0	12	1	0	0	40	0	0	2	33	0	0	111	
7:05 AM	2	11	2	0	1	6	0	0	2	39	2	0	3	34	1	0	103	
7:10 AM	6	14	5	0	0	8	0	0	2	62	6	0	2	32	0	0	137	
7:15 AM	8	21	2	0	3	10	0	0	0	52	2	0	1	23	0	0	122	
7:20 AM	3	17	2	0	0	4	0	0	0	49	4	0	4	43	0	0	126	
7:25 AM	14	25	4	0	0	12	1	0	1	57	3	0	3	48	3	0	171	1420
7:30 AM	7	25	7	0	8	17	1	0	2	41	0	0	4	25	3	0	140	1474
7:35 AM	9	25	0	0	3	11	0	0	5	60	2	0	6	40	4	0	165	1525
7:40 AM	4	33	3	0	1	19	1	0	4	54	3	0	4	63	3	0	192	1608
7:45 AM	6	42	3	0	2	20	0	0	0	65	3	0	2	47	1	0	191	1688
7:50 AM	6	23	6	0	8	16	1	0	1	58	1	0	4	57	3	0	184	1765
7:55 AM	5	23	0	0	4	15	5	0	0	73	1	0	3	69	1	0	199	1841
8:00 AM	21	23	2	0	7	22	3	0	4	53	4	0	1	40	0	0	180	1910
8:05 AM	8	18	2	0	1	19	1	0	4	50	3	0	2	50	1	0	159	1966
8:10 AM	6	15	1	0	3	15	1	0	3	56	4	0	2	50	2	0	158	1987
8:15 AM	10	23	2	0	5	18	1	0	2	54	8	0	1	38	2	0	164	2029
8:20 AM	11	25	3	0	3	16	6	0	0	38	3	0	1	44	2	0	152	2055
8:25 AM	11	15	3	0	0	19	1	0	5	76	5	0	3	41	7	0	186	2070
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	68	352	36	0	56	204	24	0	4	784	20	0	36	692	20	0	2296	
Heavy Trucks	0	24	4		8	28	4		0	32	4		0	40	4		148	
Pedestrians		0				8				0				8			16	
Bicycles	0	1	0		0	0	0		0	2	0		0	0	0		3	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: S Tacoma Way -- S 60th St
CITY/STATE: Tacoma, WA

QC JOB #: 10553223
DATE: 11/4/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:40 AM -- 7:55 AM



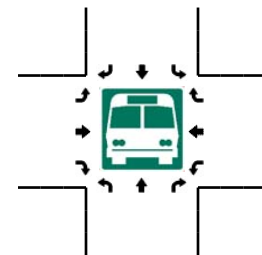
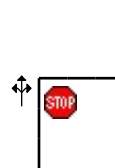
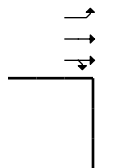
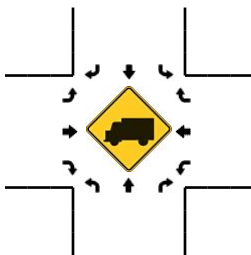
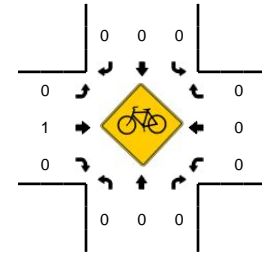
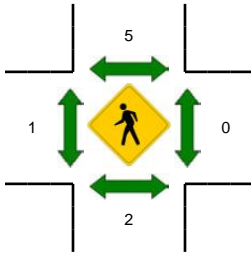
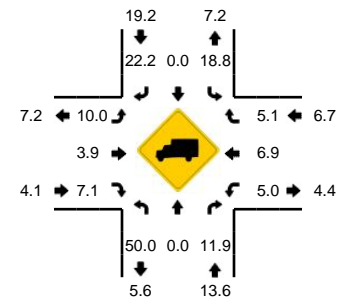
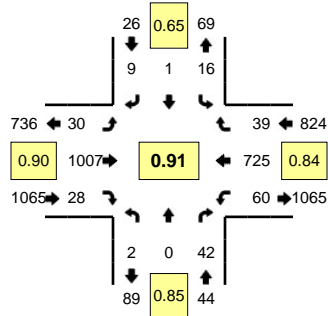
5-Min Count Period Beginning At	S Tacoma Way (Northbound)				S Tacoma Way (Southbound)				S 60th St (Eastbound)				S 60th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	15	0	0	0	6	0	0	0	0	0	0	1	0	0	0	22	
6:35 AM	0	33	0	0	1	8	0	0	0	1	0	0	0	0	0	0	43	
6:40 AM	0	25	1	0	0	17	0	0	0	0	0	0	0	0	0	0	43	
6:45 AM	0	21	1	0	0	14	0	0	0	0	0	0	0	0	0	0	36	
6:50 AM	1	21	0	0	0	14	0	0	0	0	0	0	1	0	0	0	37	
6:55 AM	1	26	0	0	0	13	0	0	1	0	0	0	0	0	0	0	41	
7:00 AM	0	24	0	0	0	14	0	0	0	0	0	0	0	0	0	0	38	
7:05 AM	0	21	0	0	0	12	1	0	0	0	0	0	1	0	0	0	35	
7:10 AM	3	21	0	0	0	13	1	0	1	0	0	0	2	0	0	0	41	
7:15 AM	1	26	0	0	0	14	1	0	0	0	0	0	1	0	0	0	43	
7:20 AM	1	33	0	0	0	13	0	0	0	1	0	0	0	0	1	0	49	
7:25 AM	0	45	0	0	0	9	1	0	0	0	0	0	0	0	0	0	55	483
7:30 AM	0	30	0	0	0	30	0	0	1	0	0	0	0	0	0	0	61	522
7:35 AM	0	37	0	0	1	24	0	0	0	0	0	0	0	0	0	0	62	541
7:40 AM	2	41	0	0	1	19	1	0	1	0	0	0	1	0	0	0	66	564
7:45 AM	2	53	1	0	1	30	0	0	1	0	3	0	0	0	0	0	91	619
7:50 AM	1	39	0	0	0	22	0	0	1	0	0	0	1	0	0	0	64	646
7:55 AM	0	25	0	0	1	22	0	0	1	0	1	0	0	0	1	0	51	656
8:00 AM	2	41	1	0	0	29	0	0	1	0	0	0	0	0	1	0	75	693
8:05 AM	0	33	0	0	1	29	1	0	0	0	0	0	0	0	0	0	64	722
8:10 AM	0	36	1	0	0	22	0	0	0	1	3	0	1	0	1	0	65	746
8:15 AM	0	21	0	0	0	29	0	0	0	1	1	0	0	1	0	0	53	756
8:20 AM	1	44	0	0	0	23	2	0	0	0	0	0	0	1	2	0	73	780
8:25 AM	1	40	0	0	0	25	1	0	0	1	1	0	1	0	1	0	71	796
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	20	532	4	0	8	284	4	0	12	0	12	0	8	0	0	0	884	
Heavy Trucks	0	12	0	0	0	20	4	0	4	0	0	0	4	0	0	0	44	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	
Bicycles	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: S Adams St -- S 56th St
CITY/STATE: Tacoma, WA

QC JOB #: 10553224
DATE: 11/4/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

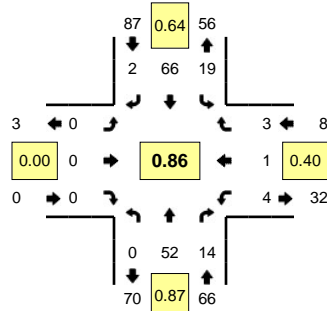


5-Min Count Period Beginning At	S Adams St (Northbound)				S Adams St (Southbound)				S 56th St (Eastbound)				S 56th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	1	0	1	0	0	0	0	62	0	0	4	26	0	0	94	
6:35 AM	0	0	4	0	0	0	0	0	0	63	0	0	7	28	1	0	103	
6:40 AM	1	0	5	0	0	0	3	0	1	65	1	0	5	22	1	0	104	
6:45 AM	1	0	1	0	0	0	0	0	2	60	2	0	4	44	2	0	116	
6:50 AM	0	0	2	0	0	0	0	0	4	63	3	0	4	37	2	0	115	
6:55 AM	1	1	4	0	0	0	0	0	3	46	5	0	7	40	6	0	113	
7:00 AM	0	0	7	0	0	0	1	0	2	51	0	0	4	39	2	0	106	
7:05 AM	0	0	2	0	0	0	2	0	2	66	1	0	5	46	4	0	128	
7:10 AM	0	0	3	0	1	0	1	0	1	69	0	0	3	39	0	0	117	
7:15 AM	0	0	5	0	1	0	0	0	1	83	1	0	2	32	5	0	130	
7:20 AM	0	0	6	0	0	0	1	0	3	80	4	0	3	41	2	0	140	
7:25 AM	0	0	4	0	1	0	1	0	1	67	1	0	2	58	4	0	139	1405
7:30 AM	1	0	2	0	1	0	0	0	4	84	3	0	3	50	3	0	151	1462
7:35 AM	0	0	3	0	0	0	2	0	1	80	1	0	3	44	5	0	139	1498
7:40 AM	0	0	7	0	2	0	0	0	5	72	0	0	3	57	6	0	152	1546
7:45 AM	0	0	3	0	2	0	0	0	2	110	6	0	9	59	3	0	194	1624
7:50 AM	0	0	1	0	0	0	1	0	1	95	2	0	1	68	7	0	176	1685
7:55 AM	0	0	2	0	0	0	1	0	4	69	6	0	6	79	2	0	169	1741
8:00 AM	0	0	5	0	1	0	1	0	4	101	1	0	6	63	4	0	186	1821
8:05 AM	1	0	4	0	1	0	1	0	5	73	4	0	3	78	3	0	173	1866
8:10 AM	0	0	4	0	4	1	0	0	2	79	1	0	4	53	4	0	152	1901
8:15 AM	0	0	0	0	0	0	2	0	0	94	2	0	4	52	0	0	154	1925
8:20 AM	0	0	7	0	2	0	1	0	0	58	2	0	10	66	0	0	146	1931
8:25 AM	0	0	4	0	3	0	0	0	2	92	0	0	8	56	2	0	167	1959
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	24	0	8	0	8	0	28	1096	56	0	64	824	48	0	2156	
Heavy Trucks	0	0	12	0	4	0	0	0	8	24	8	0	4	56	0	0	116	
Pedestrians	0	0	0	0	8	0	0	0	4	0	0	0	0	0	0	0	12	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

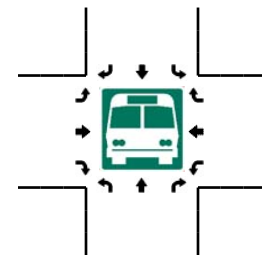
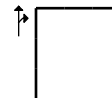
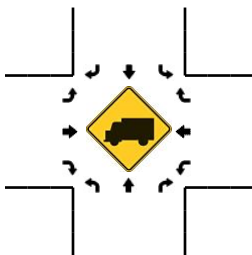
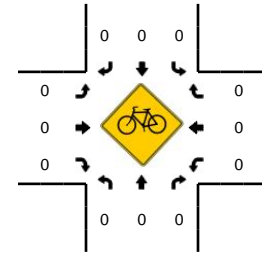
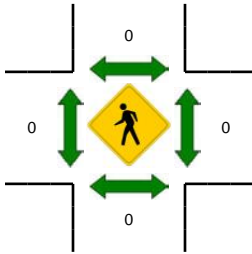
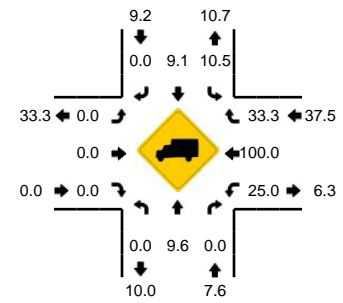
Comments:

LOCATION: S Adams St -- S 60th St
CITY/STATE: Tacoma, WA

QC JOB #: 10553225
DATE: 11/4/2010



Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:55 AM -- 8:10 AM

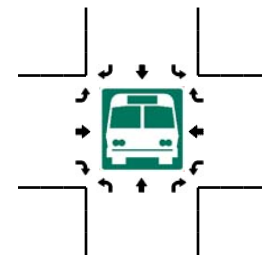
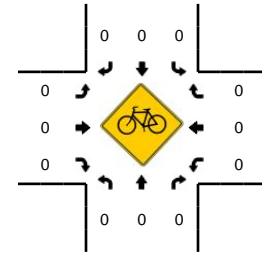
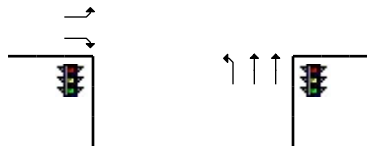
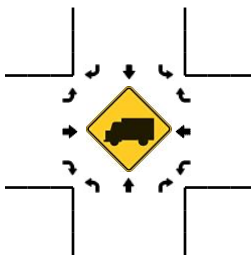
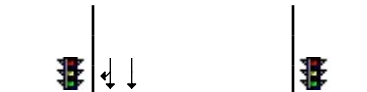
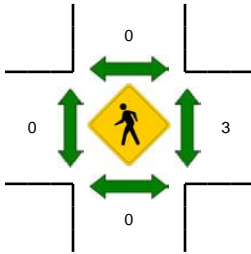
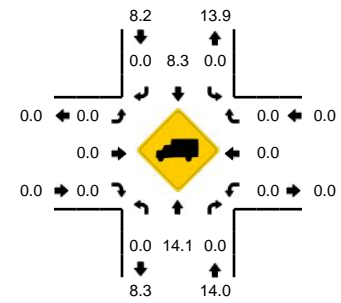
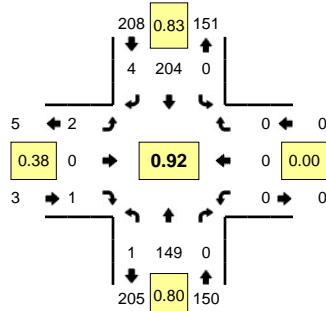
[illegible]

Comments:

LOCATION: Pacific Hwy -- Parking Lot Dwy
CITY/STATE: Lakewood, WA

QC JOB #: 10553226
DATE: 11/10/2010

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



5-Min Count Period Beginning At	Pacific Hwy (Northbound)				Pacific Hwy (Southbound)				Parking Lot Dwy (Eastbound)				Parking Lot Dwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	3	0	0	0	12	0	0	1	0	0	0	0	0	0	0	16	
6:35 AM	0	9	0	0	0	18	2	0	0	0	0	0	0	0	0	0	29	
6:40 AM	0	12	0	0	0	13	1	0	0	0	0	0	0	0	0	0	26	
6:45 AM	3	11	0	0	0	10	3	0	0	0	2	0	0	0	0	0	29	
6:50 AM	0	8	0	0	0	19	0	0	0	0	0	0	0	0	0	0	27	
6:55 AM	0	5	0	0	0	13	2	0	0	0	0	0	0	0	0	0	20	
7:00 AM	0	10	0	0	0	13	1	0	0	0	0	0	0	0	0	0	24	
7:05 AM	0	8	0	0	0	13	1	0	0	0	0	0	0	0	0	0	22	
7:10 AM	0	12	0	0	0	14	0	0	0	0	0	0	0	0	0	0	26	
7:15 AM	0	14	0	0	0	14	0	0	0	0	0	0	0	0	0	0	28	
7:20 AM	1	11	0	0	0	15	0	0	0	0	0	0	0	0	0	0	27	
7:25 AM	3	8	0	0	0	19	0	0	0	0	0	0	0	0	0	0	30	304
7:30 AM	0	16	0	0	0	11	1	0	1	0	0	0	0	0	0	0	29	317
7:35 AM	0	20	0	0	0	15	0	0	0	0	0	0	0	0	0	0	35	323
7:40 AM	0	7	0	0	0	9	1	0	0	0	0	0	0	0	0	0	17	314
7:45 AM	0	17	0	0	0	21	0	0	0	0	0	0	0	0	0	0	38	323
7:50 AM	1	11	0	0	0	23	0	0	0	0	0	0	0	0	0	0	35	331
7:55 AM	0	9	0	0	0	16	0	0	0	0	0	0	0	0	0	0	25	336
8:00 AM	0	10	0	0	0	22	0	0	0	0	0	0	0	0	0	0	32	344
8:05 AM	0	11	0	0	0	23	0	0	0	0	0	0	0	0	0	0	34	356
8:10 AM	0	8	0	0	0	18	0	0	1	0	1	0	0	0	0	0	28	358
8:15 AM	0	10	0	0	0	10	1	0	0	0	0	0	0	0	0	0	21	351
8:20 AM	0	12	0	0	0	11	1	0	0	0	0	0	0	0	0	0	24	348
8:25 AM	0	18	0	0	0	25	0	0	0	0	0	0	0	0	0	0	43	361
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	148	0	0	0	240	0	0	0	0	0	0	0	0	0	0	392	
Heavy Trucks	0	28	0	0	0	8	0	0	0	0	0	0	0	0	0	0	36	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

Appendix E
Sound Transit Access Tool

The Sound Transit Access Tool

The URS Team developed the Sound Transit Access Tool (ST Tool) for Sound Transit, basing it on the spreadsheet tool developed for *TCRP B-38: Guidelines for Providing Access to Public Transportation Stations*¹.

Primary Data Input

The ST Tool requires input such as population, employment, workers, income, 0-car households, cars per worker, and percent of commute trips by bicycle. This information is readily available through traditional planning sources. The socio-economic data is supplemented with station characteristics, such as number of parking spaces, parking fees, number of feeder transit routes, bicycle lockers and racks, commuter rail fares, and transfer fees/fares. Finally, contextual data is included, selecting from drop-down menus that cover station typology, climate, topography, and number of census blocks within a ½-mile radius of the station (a proxy for pedestrian connectivity).

Output Analysis

The ST Tool provides two levels of analysis:

Phase 3 Access Demand Analysis: This is an examination of current access mode split and anticipated mode split under the no build scenario, including:

- Phase 3A, an estimate of the ridership by mode of access for 2010 and 2030
- Phase 3B, the capacity constraints for the various access modes
- Phase 3C, an analysis of the gaps between demand and capacity

Phase 5 Alternatives Analysis: This provides a means of evaluating the impacts of potential changes to the operating and built environment

The Phase 3 initial analysis is a straightforward current year comparison of actual versus estimated mode split. The estimated mode split is based on what would be expected, given the national-level industry data used to create the ST Tool. For example, Auburn has 3% pedestrian access and 1% bicycle access, while the model estimates it should have 7% pedestrian access and 6% bicycle access. Meanwhile, auto access is higher than estimated. This provides the analyst with a starting point to determine where access improvements might be most effective. When the anticipated future conditions are added (including planned improvements), the change in the number of passengers boarding the train by access mode can be identified,

¹ The TCRP B-38 spreadsheet tool is in development, funded by the Transportation Research Board (TRB). The formulas were developed based on data collected on over 500 transit stations nationwide, covering all access modes (auto, transit, bicycle, pedestrian, and transit oriented development) and all forms of high-capacity transit (commuter rail, heavy rail, light rail, bus rapid transit, and ferries). Station typologies were developed to account for the influence of the operating environment, such as a regional transportation hub, satellite city, urban neighborhood, and suburban retail center. The tool provides a method for estimating the mode of access by station, ridership, and the impacts of changes to operations and infrastructure to the station (e.g., amount of parking, feeder bus service). Impacts are shown in terms of changes in ridership and mode of access, and financial impacts of capital and operating costs and revenues.

including the demand for parking spaces, bicycle racks/lockers, parking, etc. It is important to understand that at this point in the analysis, parking and other modes are not constrained. The ST Tool shows what the true demand is, regardless of whether or not, for example, adequate parking is provided.

The Phase 5 analysis provided by the ST Tool will tell us how changes to the operating and built environment will affect the mode of access. Options include adding/subtracting parking; removing parking to provide transit-oriented development; changes to parking fees and transfers to other transit service providers; increasing the level of feeder bus service; and other changes. In addition, changes not included as specific inputs in the ST Tool can be tested through changes in the socio-economic data. For example, if additional housing and pedestrian paths are proposed, connectivity modeling could be used to determine a new level of population and employment within 15 minutes of the station.

Role of the User

As is the case with any estimation tool, the results of the ST Tool are not to be taken in isolation and should always be applied with good judgment and local knowledge. Using the Auburn example, the low level of pedestrian access may not be related to the built environment but instead be due to low income levels near the station and low numbers of workers, and because Sounder is a higher-cost service that primarily serves higher-income jobs in downtown Seattle. In this scenario, changes to improve the pedestrian environment may increase the ST Tool's pedestrian access mode, but not result in realization of appreciable increases in actual pedestrian access.

Adaptations of the TCRP B-38 Tool for Sound Transit

The URS Team adapted the TCRP B-38 Tool to the specific needs of Sound Transit, and to the stations being evaluated in this study:

The TCRP B-38 Tool uses a simple catchment area of ½-mile radius around the station for population, employment and other socio-economic data. To better reflect the true population with access to the station, the team conducted a detailed analysis using connectivity modeling to determine the population within a 15-minute walk and 15-minute bicycle ride of the station. These refined numbers were incorporated into the ST Tool and used to adjust the estimates to allow the ST Tool to account for the effects of connectivity improvements over time.

The Sounder Access project calls for estimating mode of access through 2030. To evaluate changes over time, the team added a future year estimate input/output section. This provides a comparison between current year and future year estimates.

The ST Tool uses existing ridership and mode split. The 2030 estimated mode split function uses the access model built into the tool. Thus, actual (current) access mode splits are compared to an estimated mode split in 2030, and it is possible that any changes in mode of access are due to estimating process rather than actual changes in operating conditions. To remove this bias, the current year model ridership estimate was calibrated to the actual

ridership. This provides an apples-to-apples comparison using the estimate mode split from the ST Tool for 2010 and 2030.

Appendix F
Sound Transit Station Connectivity Tool

Station Area Pedestrian and Bicycle Connectivity Assessment

The primary metric used in the evaluation of station connectivity is the route directness index (RDI), which is the ratio between Euclidean (straight-line) distance and the actual route distance. An RDI value of 1.0 represents a route that is the most direct; whereas a low RDI score (0.5 or lower) represents an indirect, circuitous path. The minimum RDI observable in a perfect grid network is 0.71. For transit station access, the practical meaning of low RDI scores is that pedestrian and bicycle access to the station is difficult due to poor connectivity, which ultimately limits potential transit ridership. The barriers associated with a low RDI take the form of either an inadequate network (lack of optional routes) or a poorly connected street network. In particular, rail lines and freeways often pose significant barriers to network connectivity. Land use and neighborhood street design patterns also can form barriers to pedestrian and bicycle travel. For example, cul-de-sacs and long blocks require pedestrians and cyclists to travel significantly out-of-direction to reach local destinations.

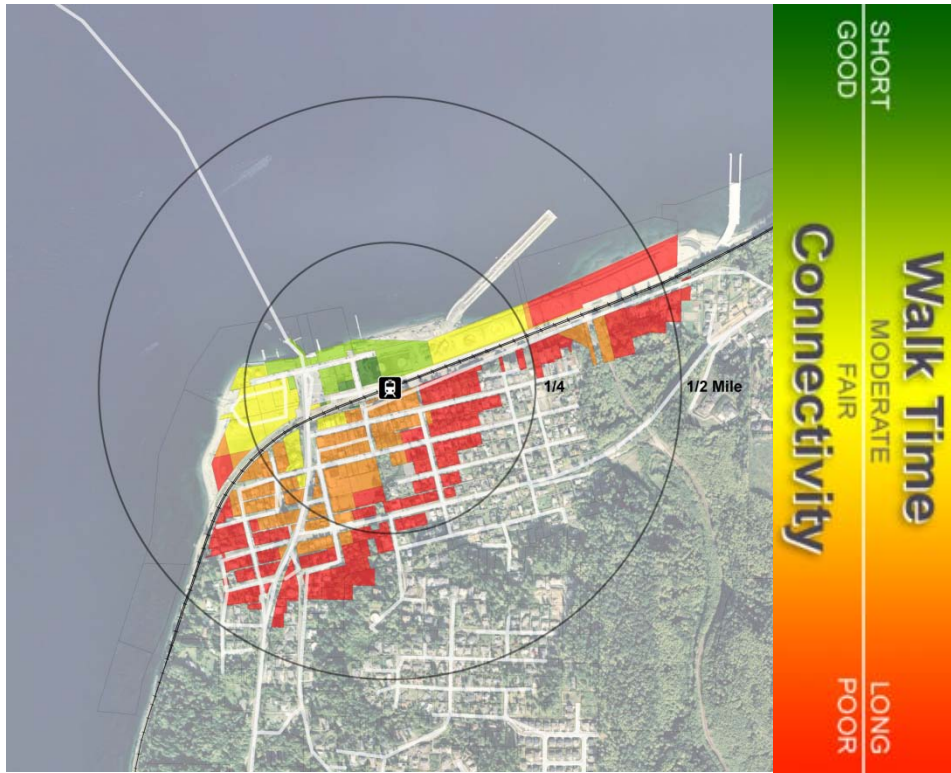
Separate connectivity calculations were made for pedestrian and bicycle access, using both RDI and the pedestrian and bicycle travel times between area land parcels and each Sounder station in the study. A 15-minute buffer was used to define the travel shed surrounding each station, based on an average travel speed of four feet per second (2.7 mph) (roughly ½ mile) for pedestrians, and an average travel speed of 10 mph (roughly two miles) for bicycles.

A normalized and composite score of RDI and travel time was calculated and mapped for each station. The composite score combines the benefit of both the RDI and the travel time metrics. For example, a parcel with a high RDI score and a very direct connection might still be located too far from the transit station and thus not be as likely to generate rail transit trips. Barriers are easier and more intuitive to pinpoint with RDI metrics than with travel time metrics alone. The composite score provides useful study area average statistics that are more meaningful when combined than applied separately.

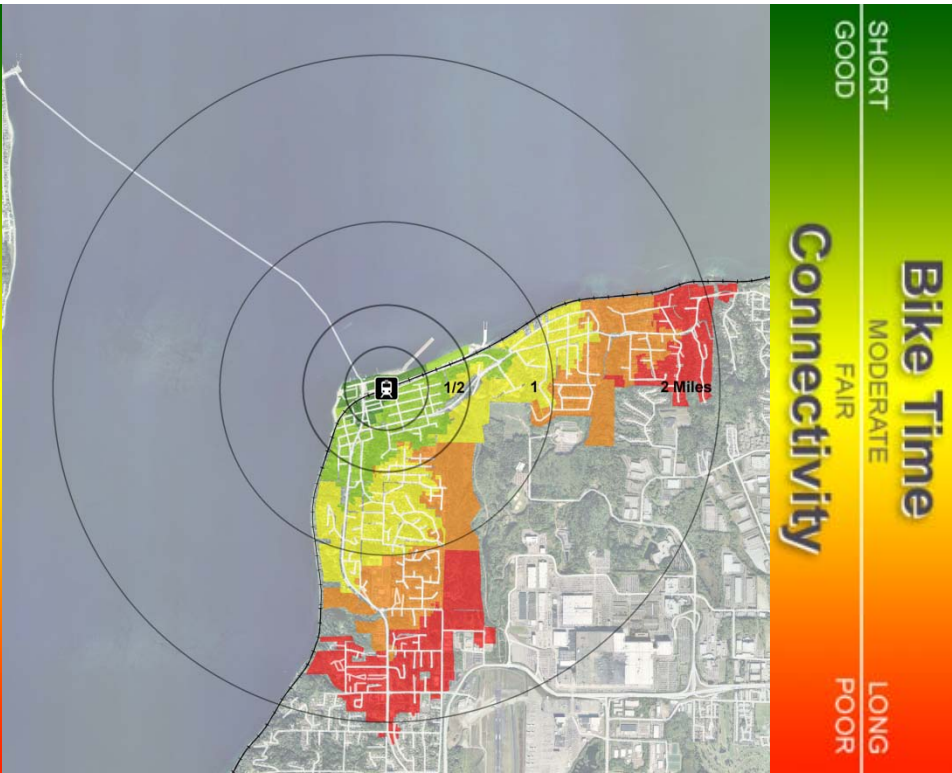
The number of current (2008) employed residents is tabulated for both the pedestrian and bicycle travel sheds. A summary of the commuter rail ridership survey data is also tabulated, indicating the trip origins by mode-share as they relate to the pedestrian and bicycle connectivity maps on the pages following.

Exhibit A: Mukilteo Station

Walk



Bike

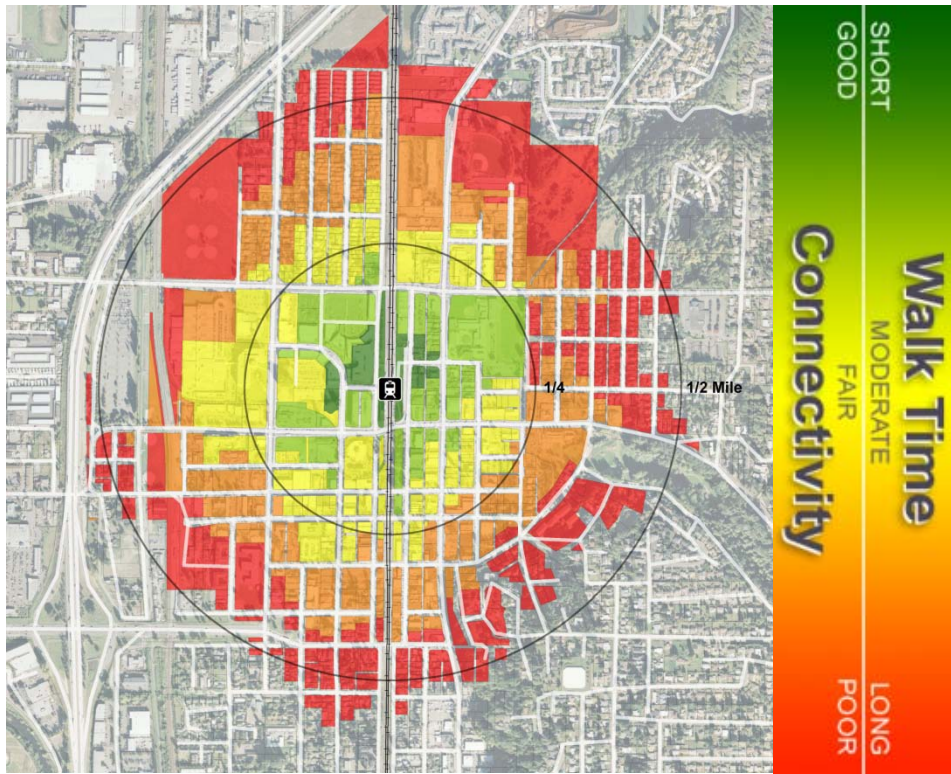


Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	0						
3-6	0						
6-9	0						
9-12	66						
12-15	94						
Sum	160	0	0	0	0	0	0

Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	47						
3-6	284						
6-9	974						
9-12	1,545						
12-15	846						
Sum	3,696	0	0	0	5	0	0

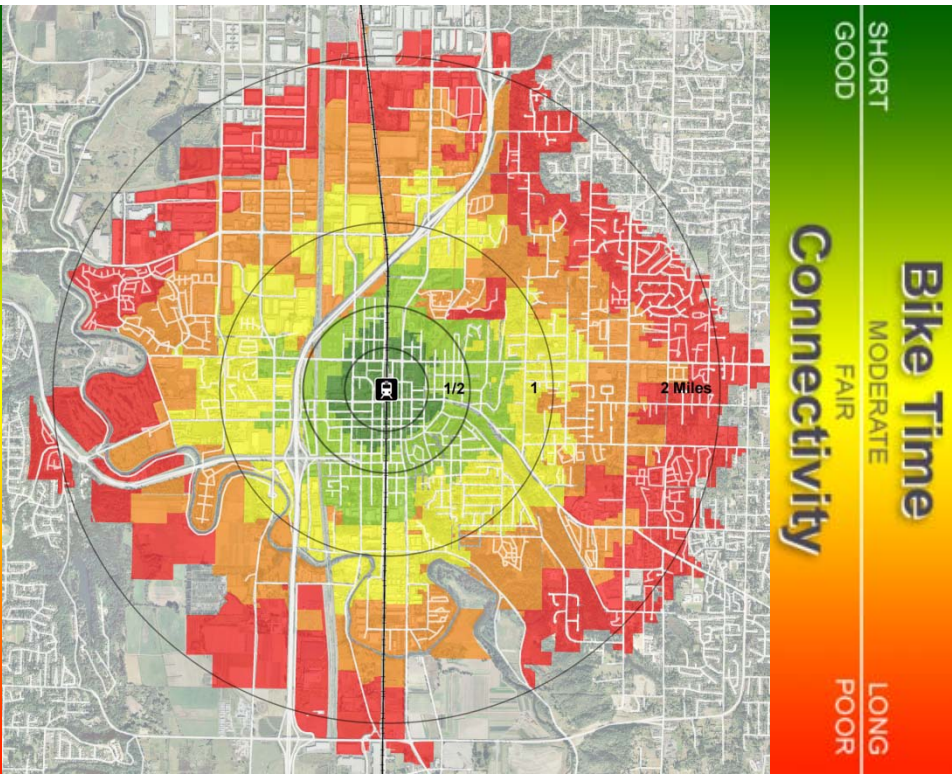
Exhibit B: Kent Station

Walk



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	0						
3-6	17						
6-9	330						
9-12	205	1		1			
12-15	565	1					
Sum	1,117	2	0	1	0	0	0

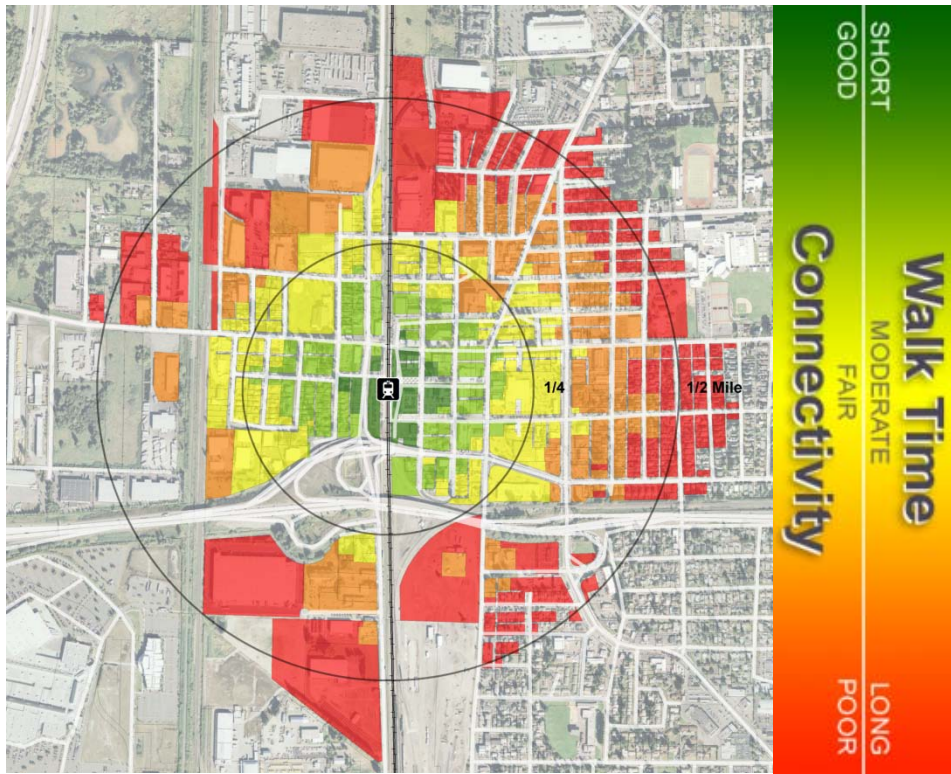
Bike



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	492			1			
3-6	1,962						
6-9	4,805				1		
9-12	6,505		1		2		
12-15	6,137				5		
Sum	19,901	0	1	1	8	0	0

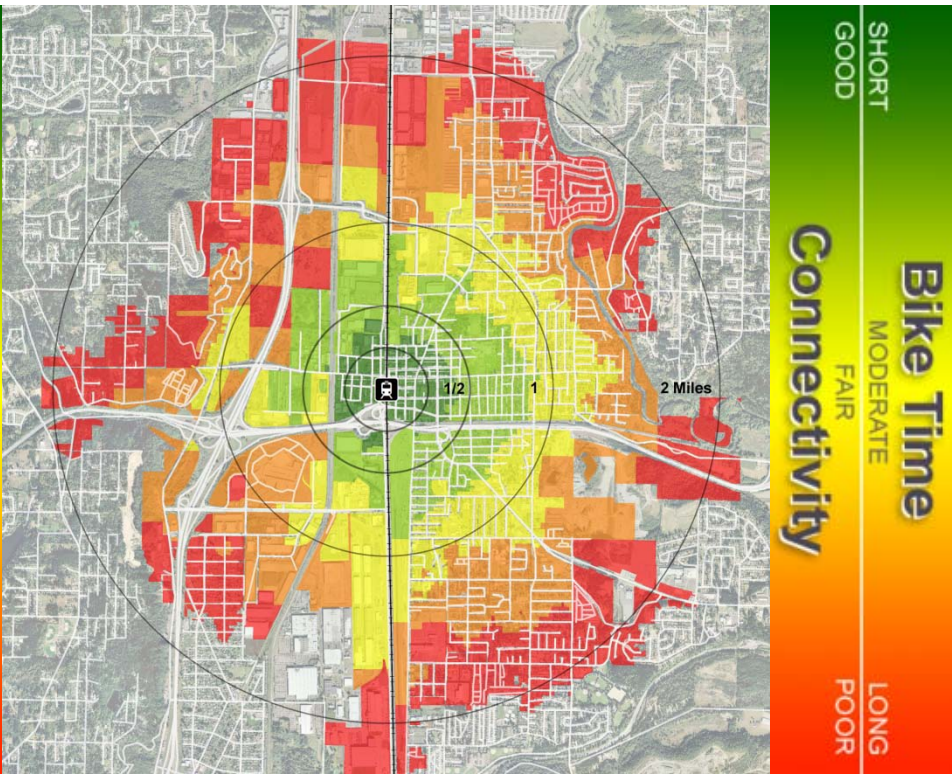
Exhibit C: Auburn Station

Walk



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	27						
3-6	101	2	1		1		
6-9	179						
9-12	185						
12-15	527	1					
Sum	1,019	3	1	0	1	0	0

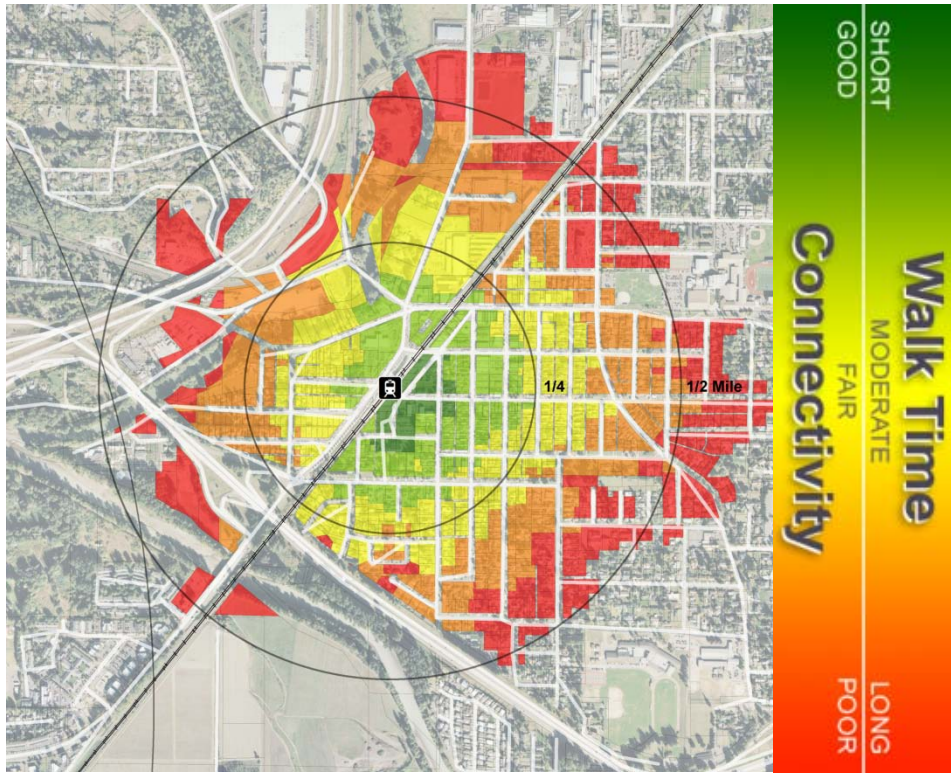
Bike



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	378		1		1		
3-6	1,675		2	1	3		
6-9	3,009	1		3	4		1
9-12	3,426			1	5		
12-15	4,265	1	3	1	2		
Sum	12,753	2	6	6	15	0	1

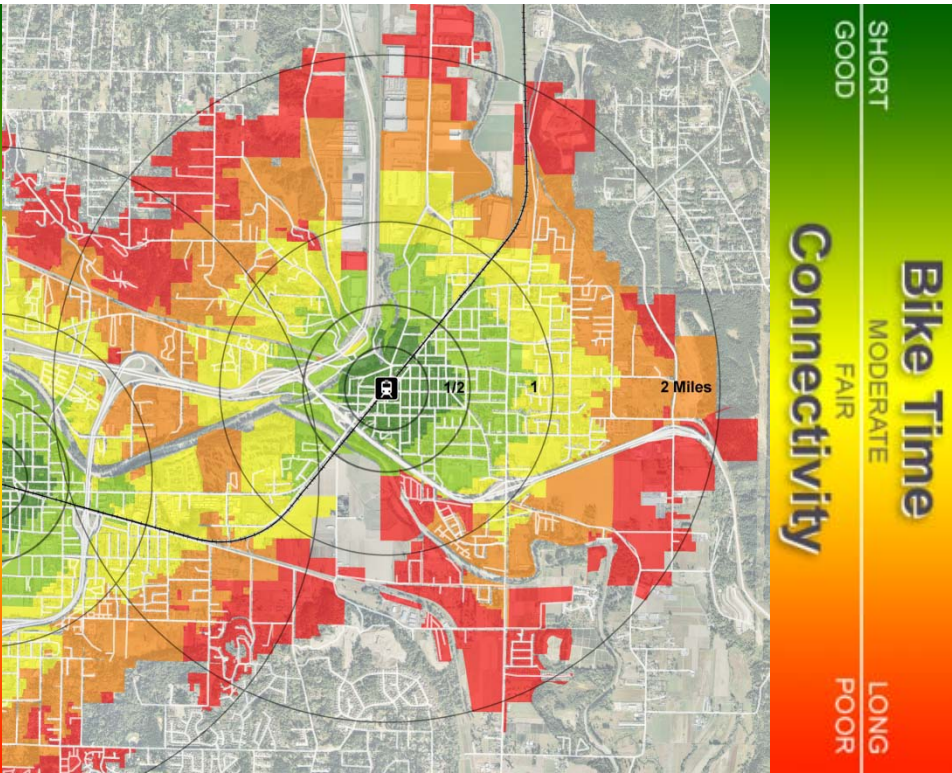
Exhibit D: Sumner Station

Walk



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	25						
3-6	105	3		2			
6-9	333	4		1	1	1	
9-12	300					1	
12-15	256	1			1		
Sum	1,019	8	0	3	2	2	0

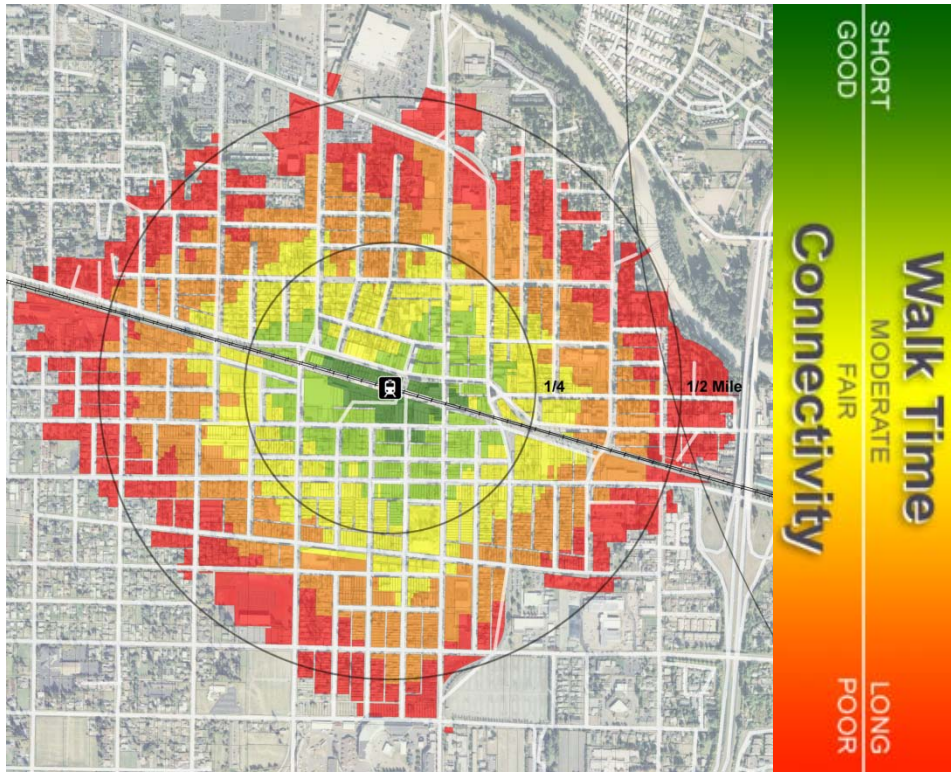
Bike



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	630			3	1	2	
3-6	1,137	3			3	2	
6-9	1,993			1	3	2	
9-12	1,715			2	1		
12-15	763				2	1	
Sum	6,238	3	0	6	10	7	0

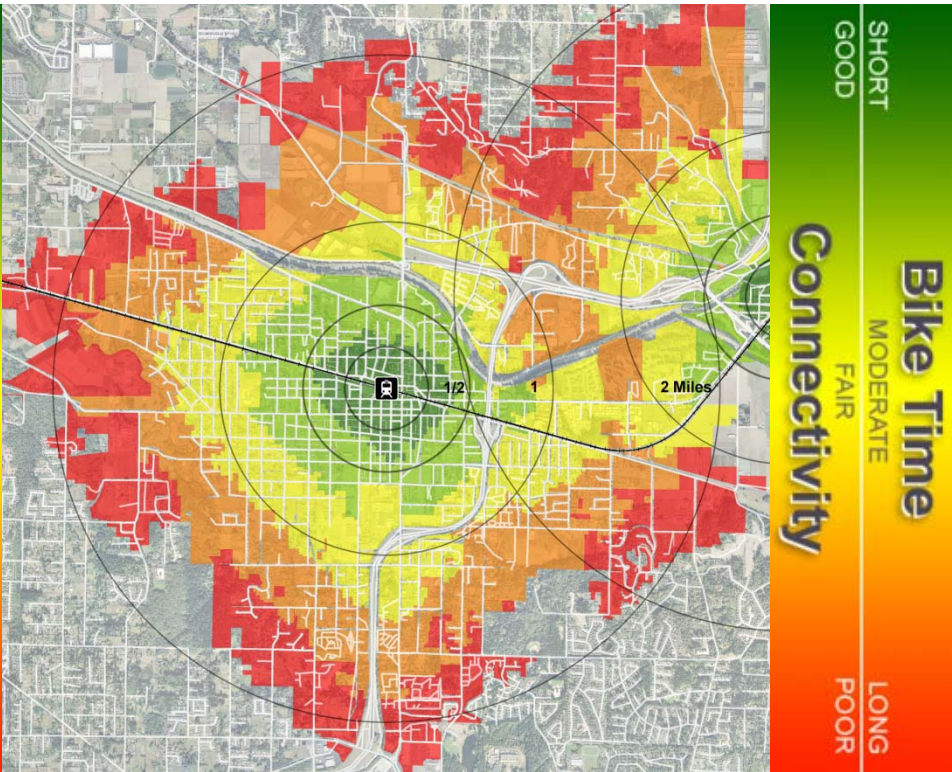
Exhibit E: Puyallup Station

Walk



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	0						
3-6	62	3		1	2		
6-9	413	1					
9-12	529	2		1	1		1
12-15	747		2		3		1
Sum	1,751	6	2	2	6	0	2

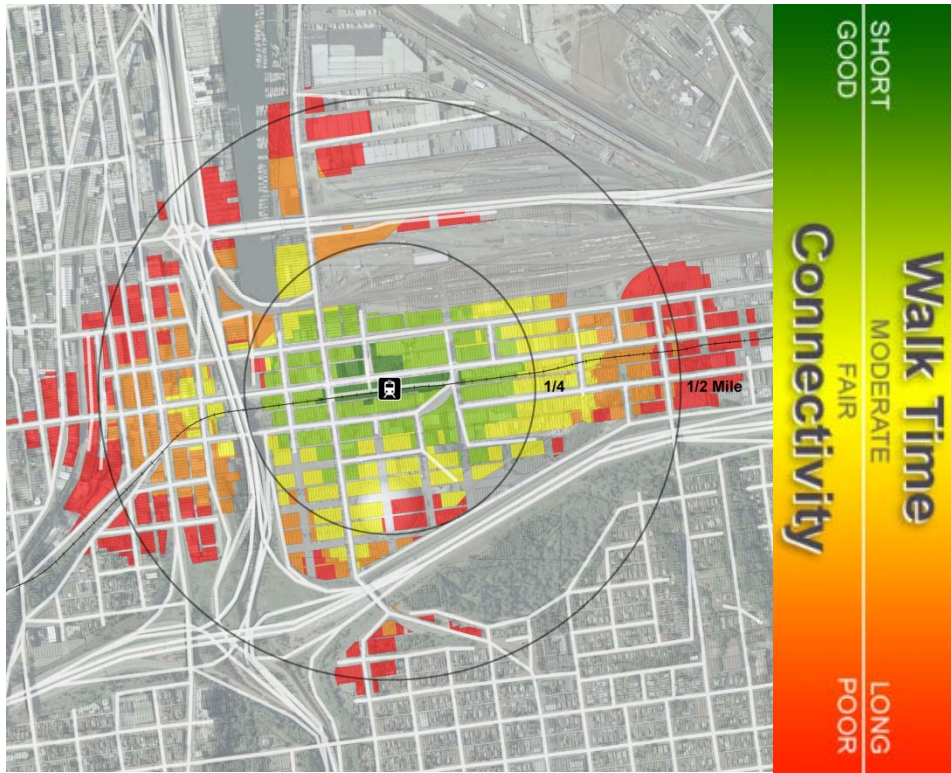
Bike



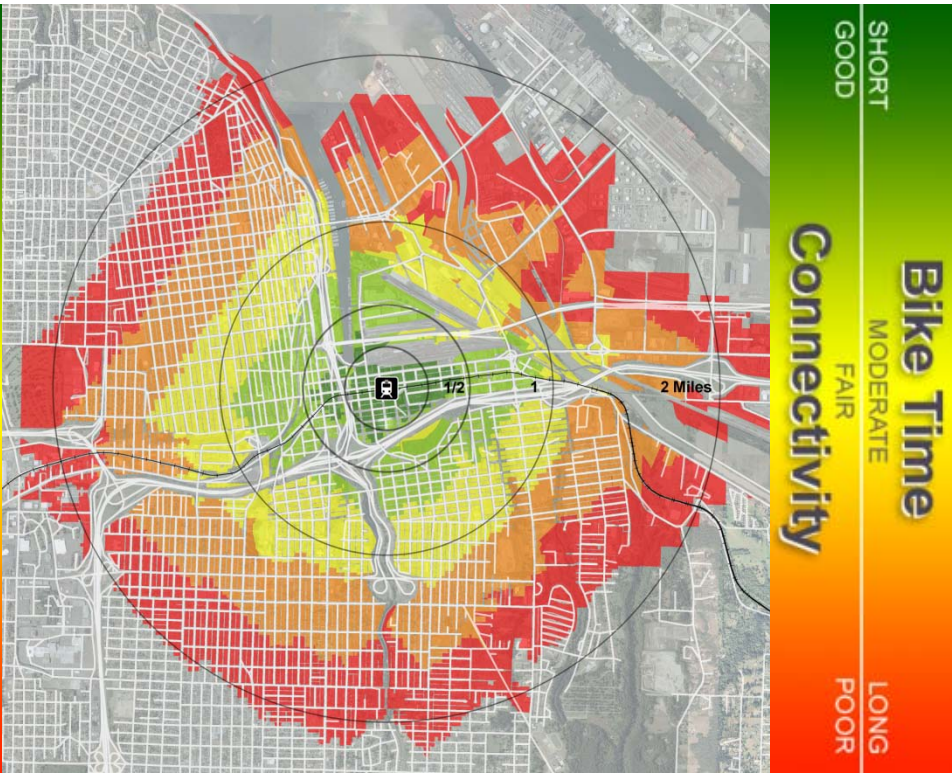
Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	776		1	2	4		1
3-6	2,420			1	3	3	1
6-9	3,798		1	2		2	
9-12	3,087		1	1	1		
12-15	1,951			1	4		
Sum	12,032	0	3	7	12	5	2

Exhibit F: Tacoma Dome Station

Walk



Bike

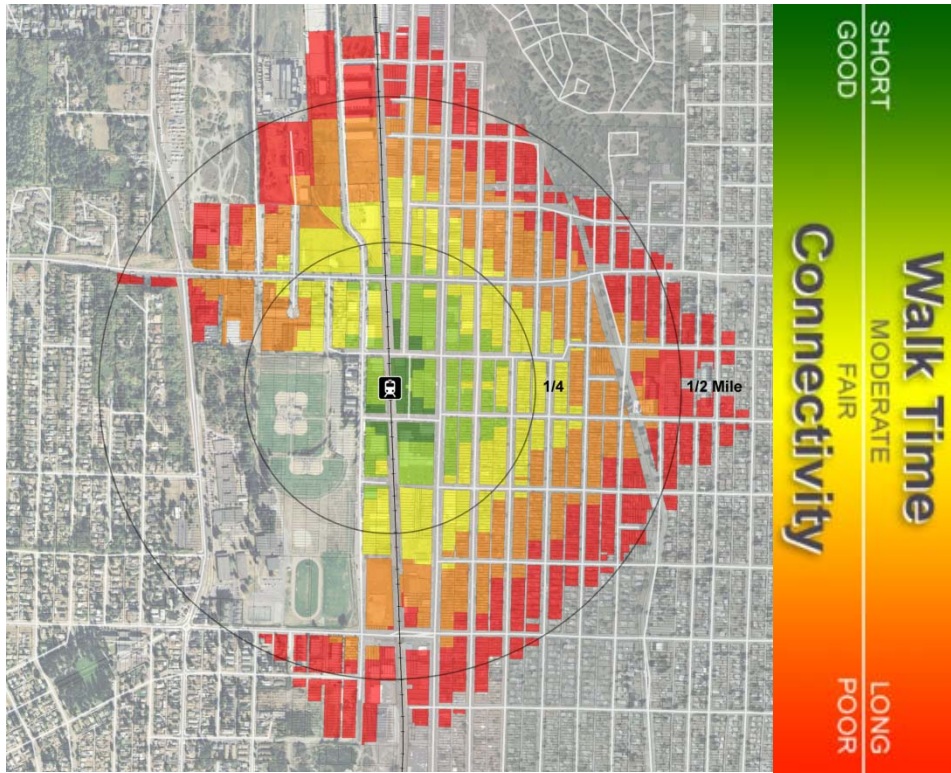


Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	0						
3-6	0						
6-9	32						
9-12	21						
12-15	64						
Sum	117	0	0	0	1	1	0

Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	53						
3-6	1,118						
6-9	3,628	1		1	3		
9-12	6,395				3		
12-15	6,900		1	2	3		
Sum	18,094	1	1	3	11	1	0

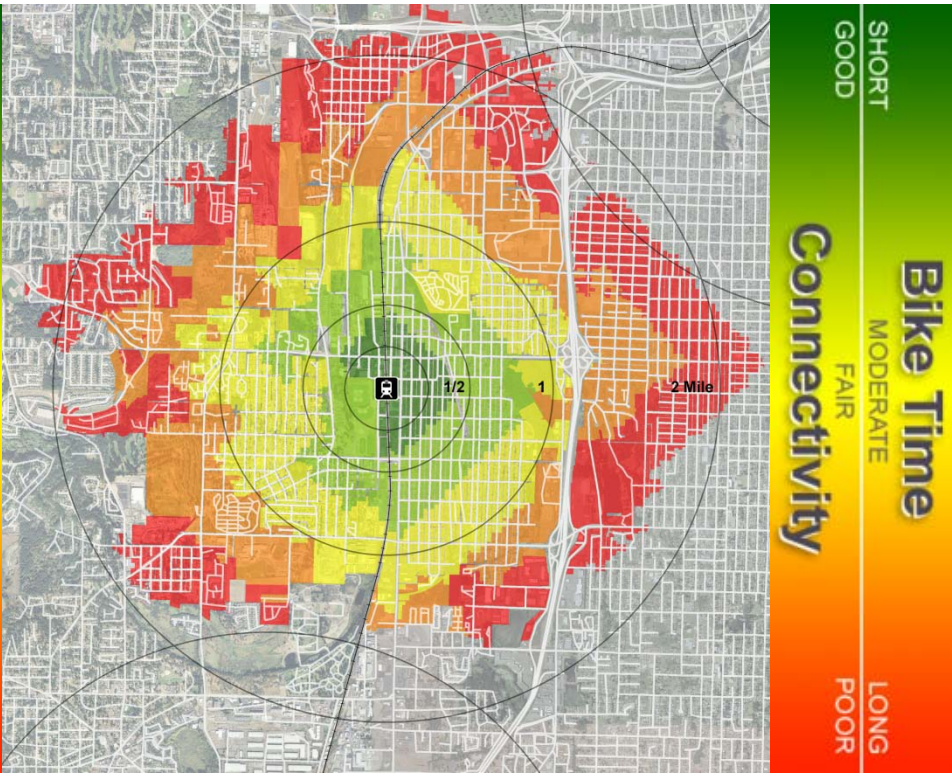
Exhibit G: South Tacoma Station

Walk



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	0						
3-6	12						
6-9	201						
9-12	403						
12-15	549						
Sum	1,165	0	0	0	0	0	0

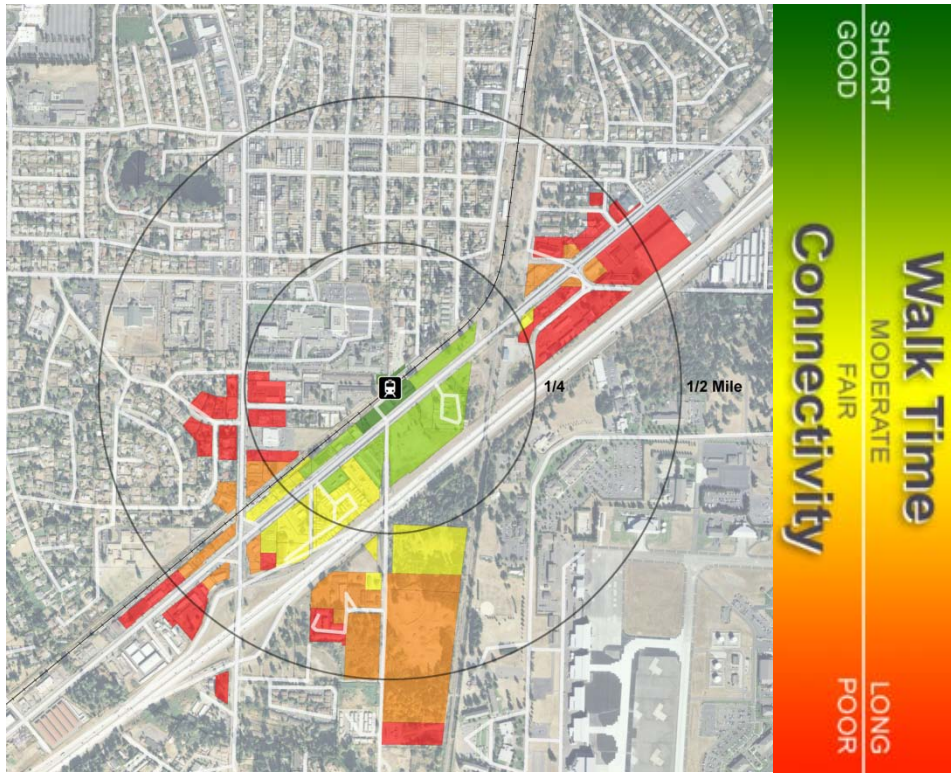
Bike



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	508						
3-6	2,447						
6-9	5,564						
9-12	2,947						
12-15	5,390						
Sum	16,856	0	0	0	0	0	0

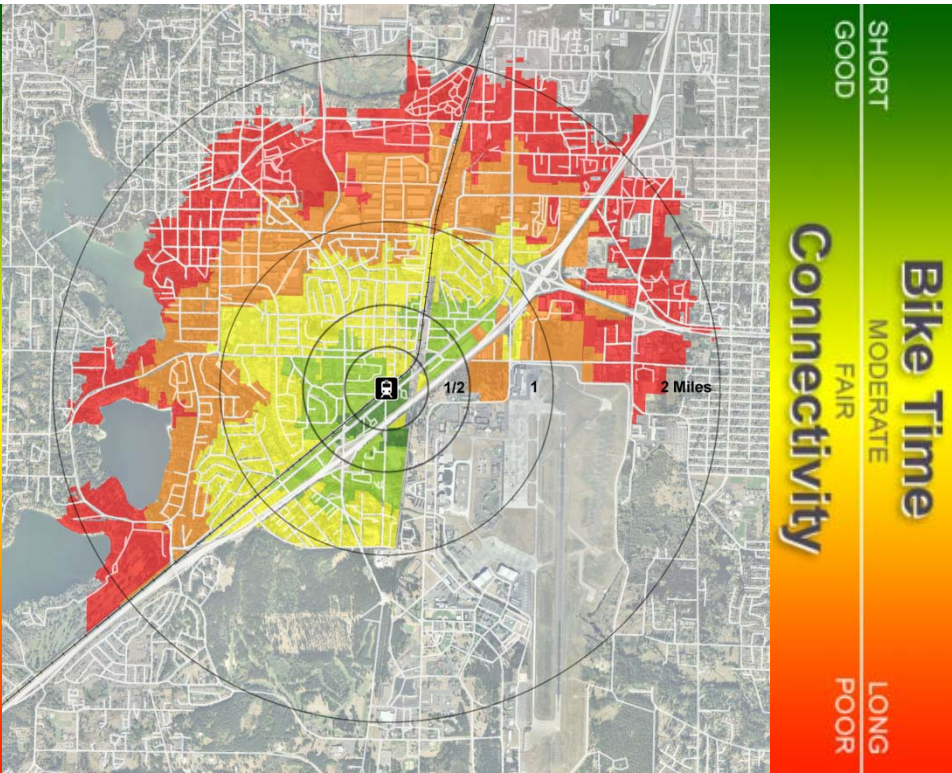
Exhibit H: Lakewood Station

Walk



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Walk	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	0						
3-6	24						
6-9	53						
9-12	15						
12-15	224						
Sum	316	0	0	0	0	0	0

Bike



Employed Residents (PSRC 2008)		Passenger Survey Rider Access by Mode					
Minutes		Bike	Bus	Kiss & Ride	P&R Lot	P&R Street	Carpool
0-3	77						
3-6	653						
6-9	2,974						
9-12	1,155						
12-15	3,030						
Sum	7,889	0	0	0	0	0	0

Appendix G
Fall 2011 and Winter 2012 Open House Summary

Fall 2011 and Winter 2012 Open House Summary

This appendix summarizes responses to a survey provided via postcards and an online survey found on the Sound Transit website. In September/October 2011 and February 2012, Sound Transit held the following seven open houses for the Sounder Access Study:

- September 22 – Tacoma Dome/South Tacoma Stations
- September 27 – Kent Station
- October 11 – Auburn Station
- October 12 – Sumner Station
- October 13 – Puyallup Station
- October 18 – Lakewood Station
- February 22 – Mukilteo Station

Attachment 1 includes the presentation boards displayed on the station platforms at each of the public open houses and postcards distributed at each station. The postcards were distributed to passengers during the morning commute for the station where an open house was conducted during the afternoon commute on the same day.

Mukilteo Station

Approximately 100 postcards were distributed at Mukilteo Station during the morning commute on February 22, 2012. Approximately 6 postcards were returned at the open house and another 12 postcards via mail. Approximately 40 passengers using the Mukilteo Station completed the online survey. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Mukilteo Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	4	7	14	9	15
Bus Facilities	2	16	13	12	5
Drop-off/Short-term Access	1	10	5	15	12
Parking Facilities	16	6	8	7	11
Pedestrian Connections	27	8	8	4	4

The following comments were noted on the surveys:

- Have a covered waiting area (8x)
- More parking (6x)
- More routes/times throughout the day (2x)
- Add a mid-morning (10:00 am) train (even if only on 1 weekday) (2x)
- Add a northbound train leaving downtown at an earlier time, 3:00 - 3:15 pm
- Add one later train in the morning (8:00/8:30 am) and evening (6:00/6:30 pm) (2x)

- Add weekend service
- Improve pedestrian access to reduce conflicts with ferry loading (e.g. pedestrian bridge) (12x)
- Better pedestrian access between Mukilteo Station and Old Town to the south (3x)
- A raised sidewalk from Mukilteo Station to Mukilteo Speedway on the south side of 92nd Street
- Improve timing of trains and ferries (3x)
- Build a barrier wall to prevent mud slides between Mukilteo and Seattle (2x)
- More Community Transit connections (especially on snow days) (2x)
- Serve Mukilteo residents as well as ferry commuters
- Provide bike lockers
- Improve the WiFi on the train
- I love Sounder!

Kent Station

Approximately 350 postcards were distributed at Kent Station during the morning commute and another 115 postcards in the afternoon on September 27, 2011. Approximately 34 postcards were returned at the open house and another 6 postcards via mail. Approximately 60 passengers using the Kent Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Kent Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	11	5	9	15	45
Bus Facilities	16	20	28	16	2
Drop-off/Short-term Access	3	18	19	24	18
Parking Facilities	52	15	6	7	12
Pedestrian Connections	20	29	17	16	5

The following comments were noted on the surveys:

- More parking (8x)
- Parking garage on the east side of tracks (2x)
- Designate parking for motorcycles and scooters
- Keep parking free
- Signs to direct to overflow parking
- Can parking in the garage be head-in only?
- Wish it was faster to get out of the garage (4x)
- Improve parking security (3x)
- Put up signage in garage, e.g.: transit commuters only before 9:00 am
- Weekend trains (2x)

- More train service (7x)
- More reverse train routes (2x)
- Midday train or express bus service (2x)
- Add earlier trips from Downtown Seattle in the afternoon
- More TVM at more locations would be awesome
- I cannot think of anything to improve your awesome facility
- Put in an Orca Card reader closer to Meridian on both sides of the track, but on the south side especially (Puyallup Station)
- More shelters on the southbound platform for the reverse commuters
- More shelters (4x)
- Improved shelters; wet and cold at 7:00 am
- Bicycle lanes from/to Covington
- Express bus service or train from/to Covington (2x)
- Coincide KC Metro Route 913 with Sounder service at Kent in the evenings
- Move platform to the north so the train doesn't block Smith (especially for emergency vehicles) (2x)
- More Orca Card readers (4x)—one at far north end of Platform #1 especially
- A car bridge over the tracks. It takes longer to get out of the garage and across Central Ave than the trip from Seattle to Kent Station.
- Traffic issue around Kent—now Green River College adds to the congestion
- Traffic signal for pedestrians crossing E. Smith Street at Railroad Avenue N. (2x)
- Crosswalks at Smith and Railroad are dangerous
- Need crosswalk striping on surface street between west platform and garage under pedestrian bridge
- Improve/replace bike straps on the train (Velcro worn out and many riders use their own bungee cords) (Las Vegas has clips on their buses that might work)
- Designated motorcycle parking; both in the covered garage and side lots
- Buses do not connect with the train in downtown Seattle in the afternoon
- Better signage—no public parking signs before 9:00 am
- Coordinate with Microsoft Connector bus
- Finish Tukwila Station
- Vendors like coffee stands at the station or a Starbucks (2x)
- Reader board displaying location of train and estimated time of arrival
- Love Kent Station

Auburn Station

Approximately 300 postcards were distributed at Auburn Station during the morning commute and another 100 postcards in the afternoon on October 11, 2011. Approximately 76 postcards were returned at the open house and another 14 postcards via mail. Approximately 51 passengers using the Auburn Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Auburn Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	4	8	15	17	59
Bus Facilities	14	39	33	19	5
Drop-off/Short-term Access	13	22	28	26	14
Parking Facilities	88	8	5	9	14
Pedestrian Connections	18	27	26	28	12

The following comments were noted on the surveys:

- More parking (32x)
- There are garage parking spaces that go on unused. Convert to Sounder riders use. (4x)
- Difficult to get out of the garage in the evening (2x)
- Disabled parking (2x)
- Charge for parking; up to \$2.00/day
- No new riders due to lack of parking
- We have voted twice now to pay for the new Auburn parking garage, yet nothing built yet.
- Sounder is the best! (3x)
- The Mayor hates you
- Synchronize traffic lights to and from the garage (2x); getting to Auburn Way
- Trains are also crowded; add another car (2x)
- Better access to Orca readers; bad placement currently; one at north end of Track 2
- More Orca readers (4x)
- Need buses more in sync with trains (2x)
- Train-bus connections in Seattle are rough (2x); Route 186
- More frequent KC Metro 164 and 181 service from Kent/Auburn to Green River (3x)
- Bring back the 6:00 pm 566 bus
- The Route 566 in the a.m. from Auburn to Bellevue is always behind; long transfer time
- Great to have the Route 566 (2x)
- Change the departure time of train #1513 by 3 minutes to leave at 5:15; why do you want to make everyone north of Yesler run to catch the train?
- More Lakeland Hills connector buses (2x)
- Shuttle from East Hill
- More shuttles to Park-n-Ride
- Better coordination between Sound Transit and KC Metro for train and bus schedules to meet one another
- Fund more local bus service; reduce advertising to pay for part of it
- More train service later in the a.m. and p.m. (11x)
- More reverse train routes (2x)
- Weekend trains (4x)
- Midday train (2x); even just one

- Better on-time record (2x)
- Finish Tukwila Station
- Hard for some of us to get on/off the buses because there is no curb
- Why do we have to stand in the rain on the platforms? (2x)
- Missed train due to light on Fourth Avenue
- A little crowded where buses come in
- Please open restrooms at 4:00 am
- Guard on Tuesday and Wednesday a.m. does not open the restrooms
- ½ car lower-level for bikes only
- More room for bikes (2x)
- Elevators are slow
- Bike hooks on lower level of garage
- Lights in the lot
- Lights in the garage would enhance safety
- Post sign over toilets “This is a moving target. Everyone please sit.”
- “No cursing” signs
- “Keep feet off seats” signs
- Turn off most lights during the day
- Post bus routes and times within the train
- Please fix the clock
- Explain to me why I can’t do the paperwork for a senior discount the day before I turn 65
- Please bring back the quiet car
- Sondra - Employee of the Year (2x)

Sumner Station

Approximately 300 postcards were distributed during the morning commute and another 210 were distributed to passengers disembarking in the afternoon on October 12, 2011. Approximately 132 postcards were returned at the open house the same afternoon and another 21 postcards via mail. Approximately 75 passengers using the Sumner Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Sumner Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	8	12	13	26	97
Bus Facilities	24	61	39	25	14
Drop-off/Short-term Access	5	23	41	61	20
Parking Facilities	191	24	2	3	6
Pedestrian Connections	15	50	59	28	16

The following comments were noted on the surveys:

- More parking (94x)
- Prevent carpoolers from using parking lot [some specifically 'construction workers'] (18x)
- I go to Kent Station because Sumner parking is full (3x)
- Get Cornforth lot back
- Open up more neighborhood streets for daytime parking (2x)
- I wish the city had not imposed such widespread RPZ's in the neighborhoods
- Build a garage or abandon the station (2x) [and build a new one just south of the city by the new Shaw Road overpass]
- Valet parking
- Paid parking (monthly?)
- Re-line the Red Apple lot (2x)
- Build a pedestrian bridge over the tracks (19x) [south end]
- Keep bus connection from Bonney Lake park-and-ride (26x)
- Don't cancel bus route 496 (25x)
- Don't cancel bus route 586 from Bonney Lake
- Bus to Orting, South Prairie (3x)
- Shuttle from Edgewood water tank area
- Really appreciate the route 578 for off train times access from Seattle (2x)
- Improve efficiency of KC Metro Route 110 at Tukwila
- More train service (2x)
- More train service earlier in the a.m.
- More train service later in the p.m. (2x)
- Run trains (smaller) during the rest of the day and weekends (2x)
- Weekend trains (3x)
- Bulletin board or website to set up carpools/rideshare (2x)
- Appreciate the amount of traffic in Sumner if ST adds more trains/parking
- Warm shelters
- More roof/shelter cover for rain (10x)
- Finish Tukwila Station (8x)
- Station agent who notifies passengers on platform of delays
- Get rid of station agent; he is a clown
- Security guards and ticket checkers on train need training; they don't know fare system or Orca cards
- Improve the intersection of SR 410 and Bonney Lake Park-and-Ride to get out of the lot after getting off the bus (2-3 light cycles)
- Extend apron at the south end of platform to cross tracks if train changes tracks
- Coffee shop on platform
- Charging station
- Sidewalks are horrible (2x) [on city streets]
- No idle zones next to lines of passengers waiting for train
- More Orca readers
- Orca reader on train

- Better Wi-Fi (2x) [stronger connection]
- More bike lockers
- Improve pedestrian crossing near Academy Street (paint, detectable texture)
- Repaint the yellow line near truncated domes on the edge of the platform
- A Jersey barrier between the pedestrian walking area and Maple Street
- Add barrier between the ramps and top of platform
- Add truncated domes to the edge of the platform where there are none
- Re-install Braille signage at all bus bays that need it
- Additional lighting so pedestrians are more visible
- Cover ramp on platform so passengers do not get soaked
- Notice that metal plates surrounding tree trunks are too small in a couple of locations and are actually being bent up in the walkway; a hazard (when walking from the 496 bus around to the lot to my boarding location)
- I appreciate being able to give you my feedback

Puyallup Station

Approximately 500 postcards were distributed during the morning commute and another 185 were distributed to passengers disembarking in the afternoon on October 13, 2011.

Approximately 92 postcards were returned at the open house the same afternoon and another 21 postcards via mail. Approximately 108 passengers using the Puyallup Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Puyallup Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	13	12	22	36	94
Bus Facilities	15	61	60	36	9
Drop-off/Short-term Access	7	21	28	74	50
Parking Facilities	169	20	7	7	13
Pedestrian Connections	20	72	59	21	19

The following comments were noted on the surveys:

- More parking (81x) [closer to station; like Kent; like Auburn]
- More handicapped parking (2x)
- Build a pedestrian bridge over the tracks (26x) [or some way of crossing]
- Upset about Puyallup removing parking options (28x)
- Combine Sumner and Puyallup stations and move to a location in between (10x)

- Animosity of Puyallup downtown businesses towards train rides is absurd and frustrating; we do purchase goods nearby (e.g. Dels, Sumner Animal Grub, Nicholson's, McClendon's) (4x)
- Puyallup should look at Kent or Auburn to see how a train station can be done right and to the benefit of the city
- No paid parking; already pay for train
- Charge for parking
- How about DSHS lot? (2x)
- Can you purchase additional lot next to 605 3rd Ave NW lot?
- Buy Fuel Depot for parking (3x)
- Tell City of Puyallup that the "downtown core" won't be visited by Sounder riders
- Crosswalk to overflow at the Eagles (3x)
- No crosswalk to overflow lot—dangerous crossing 5th Street on foot or bike (2x)
- Red Lot is not the answer (6x) [and I may stop riding because of it]
- Need off-peak bus trips to Red Lot
- More frequent connections from Red Lot to station; buses are full (17x) [or they are late]
- Designated shuttle-only bus from Red Lot to station (2x)
- Bus service from Gem[?] Heights, Puyallup
- Post all bus schedules at the station for routes and times to Downtown Seattle (to serve as a backup in the morning commute)
- Better coordination of bus and train times in Seattle
- Why is Red Lot closed during fair; didn't ST pay to have it paved?
- Dark bus stop at the Red Lot
- Turn lights on in the Red Lot (3x)
- Additional lighting
- More train service
- At least one late night train from Seattle to Puyallup
- One more later train in the evening [7:00 pm] (2x)
- More trains for Sounder and Mariners games
- Add midday and evening service (4x)
- Run the train faster, especially to catch buses
- Be on time
- A ST Express bus from Puyallup to Seattle (2x)
- Stay on consistent track (2x) [and communicate with Bus 495 which side to pick-up]
- More shelters from weather/rain (6x)
- Bistro car
- Restrooms at station (4x)
- Remove the restrooms in the train for more bicycle space
- Orca readers are few and poorly placed for departing passengers (10x) [at end of platform]
- Orca reader placed at north (Meridian) end of platform (2x)
- Finish Tukwila Station (2x)
- Tukwila Station needs weekend parking
- Quiet car (2x)

- Bike-only car
- Move the station, its killing the town (3x)
- Clean up underground toxins
- Commuters do not honor stop signs
- Puyallup High School kids in parking lot by high school
- Clean the station; grossest on the route besides Tukwila
- Repaint parking spaces and crosswalks (2x)
- Quicken connection to South Hill park-and-ride (3x)
- Route 402 run more often [every hour] (2x)
- Route 409 not running to Sumner on Sunday
- Parking plan during Puyallup Fair
- Work with City of Puyallup to develop additional parking for commuters
- Prevent vehicles idling near platforms (2x)
- Wi-Fi on trains
- Facilitated coffee vendor access
- Ask people to turn down radios, keep bags and feet off seats

Tacoma Dome Station

Approximately 200 postcards were distributed during the morning commute and another 50 were distributed to passengers disembarking in the afternoon on September 22, 2011. Approximately 77 postcards were returned at the open house the same afternoon (67 regarding the Tacoma Dome Station and 10 regarding the South Tacoma Station) and one postcard via mail. Approximately 33 passengers using the Tacoma Dome Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Tacoma Dome Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	13	9	11	16	41
Bus Facilities	24	16	28	17	6
Drop-off/Short-term Access	4	20	17	23	22
Parking Facilities	38	14	9	12	18
Pedestrian Connections	19	28	23	19	5

The following comments were noted on the surveys:

- Ensure a safe place for bikes and lighting for pedestrian access
- I think Sound Transit is great! (2x); I use the Sounder Train and Sound Transit bus to SeaTac and Seattle. The Tacoma Dome station agent is efficient and friendly. The Sounder conductors are polite and helpful. I have been riding the train for seven years.
- Direct bus from the Park-and-Rides to Tacoma Dome station
- Patrol for handicapped spots being used by folks who are not handicapped
- Install VMS messaging signage for riders exiting the parking garage on the way to the Sounder platform
- More Orca card readers on the platforms (2x)
- Fix on-board Wi-Fi (2x)
- Route 593 should go to the Tacoma Mall
- Route 586 is full; always people standing (2x)
- Finish Tukwila Station
- Would like to commute from a DuPont train station or an express train from Olympia to Seattle
- Weekend service
- Would like more socially comfortable seating on trains (spaced further apart)
- Please share with me the following costs used to produce your 2030 prediction of modality splits: gasoline – Autos, electricity – electric autos. Also, please incorporate bike infrastructure developments that will be complete by 12/2012.
- Need a Tacoma Link LRT station at Pacific Avenue/S 34th Street
- More services in/near Freighthouse Square (2x)
- Pigeons are taking over the parking structure
- Once the track extension is complete, I plan to move to the South Tacoma station

South Tacoma Station

Approximately 50 postcards were distributed at the South Tacoma Station (park-and-ride) during the morning commute on September 22, 2011. Approximately 10 passengers returned their postcard during the open house at the Tacoma Dome Station that afternoon and 4 passengers using the South Tacoma Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly.

Summary of South Tacoma Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	2	1	2	2	6
Bus Facilities	4	3	3	2	2
Drop-off/Short-term Access	2	3	4	4	1
Parking Facilities	4	4	1	2	2
Pedestrian Connections	1	4	3	3	2

The following comments were noted on the surveys:

- Keep the noise level quiet near the station
- More trips to and from Tacoma-Seattle via light rail and not buses
- Nice if a PT bus stopped at and not nearby the station
- I can't wait for the tracks to finally be connected to the rest of the railroad network

Lakewood Station

Approximately 70 postcards were distributed at Lakewood Station (park-and-ride) during the morning commute and another 140 distributed to passengers disembarking in the afternoon on October 18, 2011. Approximately 21 passengers returned their postcard during the open house that afternoon and 11 passengers using the Lakewood Station completed the online survey. Passengers were asked to rank access mode options. Not all passengers ranked all of the modes, therefore the total numbers are not the same for each mode. The number shown/tallied in each category indicates the number of passengers that ranked that access mode accordingly. The **bold** number indicates the ranking most often chosen for each access mode.

Summary of Lakewood Station Postcard Rankings

Access Mode	Ranking				
	1st	2nd	3rd	4th	5th
Bicycle	3	4	5	6	8
Bus Facilities	8	9	3	5	1
Drop-off/Short-term Access	2	4	10	5	6
Parking Facilities	13	8	1	3	4
Pedestrian Connections	3	1	9	7	7

The following comments were noted on the surveys:

- Route 574 is very important
- More PT buses stopping here (e.g. 212 or 214)
- Connect with Lakewood Town Center and 512 Park-and-Ride
- If 592 bypasses SODO, need to make first stop at Cherry, not Seneca
- Would like more information connecting to Olympia; I currently drive
- More local connections at station once Sounder service is running
- Purchase land across the street for future parking (2x)
- Restroom access for passengers (5x)
- Great bicycle storage, thanks!
- Coffee stand
- Get rid of passenger drop-off parking spots, no one uses them
- Open! (2x)

Appendix H
Evaluation Criteria Table

Mukilteo Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Bike lockers <i>(Not Shown on Map)</i>	4 lockers for long term storage, 12 racks (at station)							(see cost estimates and Tool results)	(see Tool results)	Provides end of trip facility. Capacity below desirable policy level. Reduces on-board bike demand.	Increased ease and availability of bike storage for bicyclists.	Could partner with other users of the station (Everett Transit, Community Transit).	Encourages bike users to access the station.
Waterfront Pedestrian Bridge <i>(1)</i>	Connect 2nd St to the Waterfront Promenade with a pedestrian bridge over the rail tracks (at station, 2009 BTP Plan)							“	“	Improves access to sounder station over existing conditions but improvement is not dramatic due to existing SR-525 crossing.	Shorter, reliable access for residents south of the station.	Partner with City on improvements.	Would facilitate walking to the station.
Parking Garage and Pedestrian Bridge <i>(Not Shown on Map)</i>	100-stall garage and pedestrian bridge connecting Mukilteo and terminal between Park Ave and Mt. Baker crossing (at station)							“	“	Reduces the effectiveness of existing non-SOV station access improvements.	Would offer additional parking, easier to find a space.	Coordinate on parking plan for area.	Low benefit; garage likely to increase SOVs.
Waterfront Promenade <i>(2)</i>	Re-development of the Waterfront Promenade with a multipurpose trail (0.4 miles) from Lighthouse Park to Tank Farms (0.06-0.19 miles from station, 2009 BTP Plan)							“	“	Provides limited mobility improvement over existing and planned connections	Would provide easy pedestrian access to the station for residents to the south.	Partner with City on improvements.	Would facilitate walking and biking to the station.
Japanese Gulch Trail <i>(3)</i>	Improve 2.5 miles of neighborhood trails and sidewalks connecting 44th Ave W and Mukilteo Blvd (0.17-1.4 miles from station, 2009 BTP Plan)							“	“	This segment would connect existing neighborhood trails in central Mukilteo to the station.	Makes a complete trail near the station with easy access for trail users.	“	Would facilitate multi-modal access to the station. May be constructed in an undisturbed environment.
Shoreline Trail <i>(4)</i>	Construction of an 8 mile walking and biking trail with signage along the Puget Sound (0.19-8.19 Miles from station, 2009 BTP Plan)							“	“	Does not connect to existing non-motorized facilities and has limited connections to local street network	Length may prove a deterrent for trips originating from southern Mukilteo.	“	“

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Pedestrian Wayfinding <i>(Not Shown on Map)</i>	Construct wayfinding signage between the WSF terminal, downtown, key waterfront locations, transit center and the Mukilteo Station. Estimate of (5*8=40) wayfinding arrow sides and 8 poles (at station)	N/A						N/A	Would not increase ridership.	Improves circulation/usability of station and WSF terminal, especially if terminal design is hard to navigate.	Likely quicker travel time for pedestrians to the station.	“	Encourages more people to arrive at the station by walking.
Parking Pricing <i>(Not Shown on Map)</i>	Implementation of parking pricing (at station)	N/A						“	“	Improves ability to manage demand and encourages alternative access modes, however ability to shift demand to other stations is limited in the north corridor.	May discourage some users allowing more available space.	Coordinate on parking plan for area.	May encourage more people to car/vanpool.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
5th St Improvements	Upgrade 5th Street sidewalks, curbs, and gutters (2009 Trans. Plan)							Has no direct impact on Sounder riders; would not connect pedestrians to the station.					
3rd St Downtown Gateway Sign	(2009 Trans. Plan)							Has no impact on Sounder riders.					

Kent Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Bike Lockers <i>(Not Shown on Map)</i>	8 lockers for long term storage (at station)							(see cost estimates and Tool results)	(see Tool results)	Provides end of trip facilities for trips encouraged by existing non-motorized facility investments. Existing bike parking capacity not sufficient to meet forecasted demand.	Increased ease and availability of bike storage for bicyclists.	Could partner with other users of the station (King County Metro).	Encourages bike users to access the station.
Mill Creek Pedestrian Bridge <i>(1)</i>	Enhance or replace the existing pedestrian bridge from Kennebeck Ave N to E Temperance St (0.21 miles from station, 2011-2016 TIP)							“	“	Maintains and improves access already provided by existing temporary structure.	No significant change beyond existing conditions.	Could partner with City on improvements, but little overall benefit to station.	“
Reiten Rd Sidewalks <i>(2)</i>	Complete sidewalks along one side of Reiten Rd from Titus St to Gulberson St (0.31-0.77 miles from station)							“	“	Coupled with other projects, this would provide pedestrian access to the station for numerous residents living southeast of the station.	Increased ease for pedestrians.	Partner with City on improvements.	“
2nd Ave Bike Lane/Sharrows <i>(3)</i>	Addition of bike lane or sharrows, including necessary signage on 2nd Ave from Gowe St to James St (0-0.17 miles from station)							“	“	Connects to East/West bike lane on James St. Fills a gap in the existing bicycle system network for access to the station.	“	“	“
Expand Drop-Off Capacity <i>(Not Shown on Map)</i>	Expand the drop-off capacity along Railroad Ave for up to 10 spaces. Lot (30 stalls) at Smith and Railroad made available for parking. City to do project if ST provided materials (at station)							“	“	Increases ridership potential with limited public investment and ensure that Kiss and Ride vehicles do not negatively impact transit operations.	No significant change.	Partner with City on improvements.	No significant change.
Shared Facility Project along James St <i>(4)</i>	Participate in a “bike-by-bus” program with the City of Kent and King County Metro; includes adding signage or other information to bike riders along James Street to S 240th St (0.1-1.19 miles from station)							“	“	Links two unconnected East/West bike lane segments on James St via bus due to steep grades. Fills a gap in the existing bicycle system network for access to the station. High vehicle volumes and speeds on James St moderate benefits.	“	Partner with City and King County Metro on improvements.	Facilitates biking to the station.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Reiten Rd Sharrows (5)	Addition of sharrows including necessary signage on Reiten Rd from E Titus St to E Maple St (0.31-1.05 miles from station)							“	“	Provides limited improvement over existing conditions due to steep slope and narrow travel lanes.	Does not provide for direct access to the station for bikers.	Partner with City on Improvements	“
Gowe St/Titus St Bike Lane/ Sharrow (6)	Addition of bike lane or sharrows, including necessary signage on Gowe St and Titus St from E Meeker St to E Smith St (0.24-0.32 miles from station)							“	“	Connects to East/West bike lane on Smith/Canyon Dr. Fills a gap in the existing bicycle system network for access to the station.	Quicker travel time for bikes to the station.	“	“
Parking Pricing <i>(Not Shown on Map)</i>	Implementation of parking pricing (at station)	N/A						N/A	Would not increase ridership.	Improves the ability to shift demand to underutilized stations and encourages non-SOV access modes.	May discourage some users allowing more available space.	Coordinate on parking plan for area.	May encourage more people to car/vanpool.
Real-time Parking Availability Signage <i>(Not Shown on Map)</i>	Install real-time parking availability information signage on major access route and parking guidance at garage. See “PARIS” from Puget Sound P&R System Update 2001 (at station)	N/A						“	“	Improves utilization and balance of existing parking capacity at a systems level. Generally provides more benefits to existing riders than increases ridership.	Consistent way for users to know parking availability and change behavior accordingly.	Could partner with other transit providers.	No significant change.
<i>The following projects have been removed from further consideration and are not shown on the map in Chapter 5</i>													
E Smith St Sidewalks	Construct and repair sidewalks on E Smith St from Railroad Ave to Kennebeck Ave							Sidewalks already exist on this portion of E Smith St.					
Titus St Sidewalk	Construct and repair sidewalks on E Titus St from Gowe St to Reiten Road							Sidewalks already existing; no need for repair.					
W Meeker St Widening	Widen W Meeker St to 5 lanes including bike lanes, and sidewalks (2011-2016 TIP)							Pedestrian and bicycle facilities already exist.					
James St/S 240th Sharrows and Bike Lane	Addition of sharrows/bike lane including necessary signage on James St and S 240th St from BNSF Railroad Tracks to 100th Ave SE							James St is considered to be too steep for sharrows/bike lanes to be feasible.					
James St Pedestrian Path	Construct a pedestrian path along James St							James St already has sidewalks from Lakeside Blvd E to the Green River Trail.					
Mill Creek Trail	Construct a trail along Mill Creek connecting Mill Creek Park and Kent Memorial Park							Not along a primary access routes. Seen as redundant to ‘James St Pedestrian Path.’					
S 212th St Bridges	Construct a bridge with sidewalks and bike lanes over the railroad (2011-2016 TIP)							Project location is 2 miles from the station and as such is considered to have poor connectivity and a long bike time regardless of improvements proposed.					
SR-516/Willis St Bridges	Construct a bridge with sidewalks and optional bike lanes over the railroad (2011-2016 TIP)							No existing pedestrian or bicycle facilities along SR-516/Willis St that would connect to this short, isolated segment.					

Auburn Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
A St NE Bike Wayfinding and Bike Boulevard (1)	Add wayfinding to non-motorized trail connection on A St NE between 10th St NE and 7th St NE. Construct sidewalk between 7th St NE and 3rd St NE and calm traffic. Work to improve circulation on Fred Meyer’s property. (0.25-0.67 miles from station)							(see cost estimates and Tool results)	(see Tool results)	Improves quality and visibility of existing non-motorized facility.	Shortcut for cyclists/walkers to the station; one of the only ways to get north of 7th St without taking Auburn Way (low quality sidewalks, no bike facilities)	Partner with City on improvements.	“
C St SW Trail (2)	Construct a trail along the west side of C St SW from the SR-18 & C St SW interchange to 15th St SW (0.17-0.64 miles from station)							“	“	Closes a gap in non-motorized access to the station by connecting with existing bike lanes on 15th St SW and the Interurban Trail.	Makes a complete trail near the station, easier access for trail users.	“	“
A St SW Sharrows (3)	Addition of sharrows including necessary signage along A St SW from Main St to 3rd St SW (0-0.15 miles from station)							“	“	Connects to East/West sharrows on Main St. Fills a gap in the existing bicycle system network for access to the station.	Quicker travel time for bikes to the station.	“	Facilitates biking to the station.
W Main St Bike Lanes (4)	Addition of bike lanes and signage on W Main St from Railroad crossing to R St NE/SE (0-1.11 miles from station)							“	“	This long segment of East/West bike lanes would connect to proposed North/South bike lanes on R St NE/SE and other bike lanes in the vicinity of the station, closing a gap in non-motorized access to the station.	“	“	“
2nd St SW Sharrows (5)	Addition of sharrows and signage on 2nd St SW from A St SW to F St SE (0-0.44 miles from station)							“	“	When coupled with the previous project, would fill a gap in the existing bicycle system network for access to the station.	“	“	“
Expand Drop-Off Capacity <i>(Not Shown on Map)</i>	Expand the drop-off capacity for up to 10 spaces (at station)							“	“	Increases ridership potential with limited public investment.	No significant change.	Partner with City on improvements.	No significant change.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Bike Lockers <i>(Not Shown on Map)</i>	20 lockers for long term storage and 6 racks (at station)							“	“	Provides end of trip facilities for trips encouraged by existing non-motorized facility investments. Existing bike parking capacity not sufficient to meet forecasted demand.	Increased ease and availability of bike storage for bicyclists.	Could partner with other users of the station (King County Metro).	Encourages bike users to access the station.
A St NE Sidewalk and Ramp Improvements <i>(Not Shown on Map)</i>	Enhance sidewalks and access ramps between downtown Auburn and 8th St NE business district on A St NE (distance to station unknown)							“	“	This would improve access to the station from an area that has limited access.	Enhances connection to downtown and station.	Partner with City on improvements.	Facilitates multi-modal access to the station.
R St NE Bike Lanes <i>(6)</i>	Addition of bike lanes and signage on R St NE from E Main St to 8th St NE (1.1-1.25 miles from station)							“	“	When coupled with the previous projects, would fill a gap in the existing bicycle system network for access to the station.	Quicker travel time for bikes to the station.	Partner with City on improvements.	Facilitates biking to the station.
Parking Garage <i>(7)</i>	Construct a 300 stall parking garage (at station)							“	“	Reduces the effectiveness of existing non-SOV station access improvements and possibly requires the removal of existing surface parking built by Sound Transit.	Would offer additional parking spaces, easier to find a space.	Coordinate on parking plan for area.	Low benefit; likely to increase SOVs.
Parking Pricing <i>(Not Shown on Map)</i>	Implementation of parking pricing (at station)	N/A						N/A	Would not increase ridership.	Improves the ability to shift demand to underutilized stations and encourages non-SOV access modes.	May discourage some users allowing more available space.	“	May encourage more people to car/vanpool.
Real-time Parking Availability Signage <i>(Not Shown on Map)</i>	Install real-time parking availability information signage on major access route and parking guidance at garage. See “PARIS” from Puget Sound P&R System Update 2001 (at station)	N/A						“	“	Improves utilization and balance of existing parking capacity at a systems level.	Consistent way for users to know parking availability and change behavior accordingly	Could partner with other transit providers.	No significant change.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
Environmental Park Study								Not a capitol project					
Downtown to Les Gove Study								Not a capitol project					
Auburn Way Corridor Improvements	Improve pedestrian accessibility, appearance between 4th St NE and 4th St SE (2011-2016 TIP)							Not along primary access routes to the station; 2nd and 3rd Streets NE are the only streets without E/W signalized crossing.					

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
A St NW, Phase 2	Construct a multi-lane arterial from W Main St to 3rd St NW (1/5 mile)							Doesn't provide new non-motorized connections. See project below.					
A St NW Bike Lanes	Addition of bike lanes and signage on A St NW east of Sounder tracks to 15th St NW, then west along 15th to 10th St NE							Portions of A St NW do not currently exist; as such this project is in the preliminary stage and could change in the future.					
C St SW Bike Lanes	Addition of bike lanes and signage on C St SW to 3rd St SW							North/south circulation likely happens within station/platform area and along railroad track path					
Interurban Trail Connection	Construct a pedestrian and bicycle path from the Interurban Trail to Environmental Park							Not along primary access route to Sounder station					

Sumner Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Linden Dr/ SR 410 Crossing Improvements <i>(1)</i>	Construct sidewalks north and south of bridge structure, widen sidewalk along SW side of bridge structure (0.14-0.25 miles from station)							(see cost estimates and Tool results)	(see Tool results)	Closes a gap in non-motorized access to the station. It would connect the River Walk Trail and high quality non-motorized facilities along E Main Ave. with downtown Sumner.	Increased ease for pedestrians; can make for shorter trips.	Partner with City of Puyallup and WSDOT.	Facilitates walking to the station.
Academy St Bike Boulevard <i>(2)</i>	Bicycle boulevard from Sumner Station to Valley Ave, including signage, traffic calming and intersection improvements at Wood Ave and Valley Ave E (0-0.71 miles from station, Identified in Sumner Trail Master Plan)							"	"	Connects to North/South bike lane on Valley. Closes a gap in the existing bicycle system network for access to the station, and improves pedestrian access through traffic calming.	Likely quicker travel time for bikes to the station.	Partner with City on improvements.	Facilitates biking to the station.
Riverwalk Trail Access Point <i>(3)</i>	Connection 134th Ave E with Riverwalk Trail on south side of Puyallup River with a paved connection and barriers removed (0.35-0.40 miles from station)							"	"	This short connection provides a paved outlet for the existing River Walk Trail underpass under E Mail St. and railroad tracks.	"	"	Facilitates walking and biking to the station.
Puyallup River Trail Extension <i>(4)</i>	Extends existing trail along north side of the Puyallup River from 72nd St E to Traffic St (0.26-0.59 miles from station, Trail Plan)							"	"	Closes a gap in the trail along the north side of the Puyallup River. A completed trail would provide access to the station for housing south of SR-410.	Makes a complete trail near the station, easier access for trail users.	Partner with City on improvements.	Facilitates multimodal access to the station; construction may occur in undisturbed environment.
Bike Lockers <i>(Not Shown on Map)</i>	Install 20 lockers for long term bike storage and 9 racks (at station)							"	"	Expands upon existing bike storage but does not leverage those investments. Supports additional ridership created through investment in bicycle facility network improvements.	Increased ease and availability of bike storage.	Could partner with other users of the station (Pierce Transit).	Encourages more people to arrive at the station by bike.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
White River Trail Extension <i>(5)</i>	Extends existing trail running along east side of White River from State St to Stewart Rd. Links existing trail segments. (0.32-3.26 miles from station, suggested by City)							"	"	This connection does little to improve access to the station, since the existing trail segment does not provide direct access to the station for housing or employment land uses.	No significant change.	Partner with City on improvements.	Facilitates multimodal access to the station; construction may occur in undisturbed environment.
Parking Garage – Large <i>(Not Shown on Map)</i>	Construct a 450 stall garage (at station)							"	"	Reduces the effectiveness of existing non-SOV station access improvements and possibly requires the removal of existing surface parking built by Sound Transit.	Would offer most parking, easier to find a space.	Coordinate on parking plan for area.	Low benefit; may increase SOVs.
Parking Garage – Small <i>(Not Shown on Map)</i>	Construct a 150 stall parking garage (at station)							"	"	Reduces the effectiveness of existing non-SOV station access improvements and possibly requires the removal of existing surface parking built by Sound Transit.	Would offer additional parking spaces, less than large option.	"	"
Station Pedestrian Bridge <i>(6)</i>	Construct a pedestrian bridge over railroad tracks roughly in line with Elizabeth St connecting the east and west side of station (at station)							"	"	Improves station circulation but does not especially leverage existing investment besides the Sounder station itself.	Shorter travel time for passengers; reliable way to cross tracks.	Coordinate on land use plans for area.	No significant change.
SR 410 Non-Motorized Bridge <i>(Not Shown on Map)</i>	Construct a new bridge for non-motorized users over SR 410 connecting Sumner Ave and 143rd Ave E. (0.54-0.63 miles from station)							"	"	Closes a gap in non-motorized access to the station. It would connect neighborhoods south of SR-410 to existing non-motorized facilities southeast of the station.	Shorter travel time for residents south of SR-410.	Partner with City and WSDOT.	Facilitates multimodal access to the station; construction may occur in undisturbed environment.
Parking Pricing <i>(Not Shown on Map)</i>	Implementation of parking pricing (at station)	N/A						N/A	Would not increase ridership.	Improves the ability to shift demand to underutilized stations and encourages non-SOV access modes.	May discourage some users allowing more available space.	Coordinate on parking plan for area.	May encourage more people to car/vanpool.
Expand Drop-Off Capacity <i>(Not Shown on Map)</i>	Expand the drop-off capacity for up to 14 spaces (at station)	N/A						"	"	Increases ridership potential with limited public investment	No significant change.	Partner with City on improvements.	No significant change.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
Urban Sidewalk Program	Construct sidewalks and road improvements on Parker Road between Main St and 50th St.							Project is largely completed.					

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Elm St Improvements	Improve Elm Street with curb, gutter and sidewalks on each side between E. Valley Highway and 160th Ave E.							Too far from station to affect pedestrian ridership.					
Valley Ave E Improvements	Widen roadway along Valley Ave (from Main St to Elm St) to three lanes and improve to minor urban arterial standards with curb, gutter, sidewalks, and bike lanes.							Project is complete.					
Main St E and 160th Ave E Improvements	Improve and square off intersection at Main St and 160th and improve and widen streets to minor arterial standards with bike paths and sidewalks.							Project is complete.					
Valley Ave E and W Valley Highway Improvements	Construct intersection improvements and install traffic signals at Pacific Ave and West Valley Highway. Widen roadway to three lanes and reconstruct to minor urban arterial standards with curb, gutter, sidewalks, and drainage utilities.							Not a direct connection to ridership.					
W Valley Highway Improvements	Widen roadway (from Pacific Ave to 30th St) to provide left turn lanes, as needed and improve to minor urban arterial standards with curb, gutter, and sidewalks on one side.							Project is largely completed.					
Zehnder St Improvements	Reconstruction of the existing 18 foot-wide concrete street to collector street standards with curbs, gutters, sidewalks, and drainage facilities.							Project is complete.					
Bridge St bridge replacement	Replace the Bridge St bridge to accommodate both bicycle and vehicular access to areas west of the White River.							Bridge includes sidewalk-areas for bicycle traffic. Currently WSDOT has no plans to replace this aging bridge.					
W Valley Highway E Bike Lane Extension	Extension of existing bike lanes along W. Valley Highway E. from 42nd St E. north to Jovita Boulevard E.							Unlikely to affect ridership due to distance from the station and lack of direct access for bicyclists from surrounding neighborhoods to W Valley Highway E.					
Fryar Ave Bike Lanes	Proposed bike lanes along Fryar Ave from Main St north to the White River crossing.							Project is complete.					
Valley Ave Bike Lane Extension	Extension of existing bike lanes along Valley Ave from Washington St north to Elm St.							Project is complete.					
Puyallup River Overpass	Proposed pedestrian/bike overpass crossing Puyallup River along Rivergrove Dr.							Currently not funded and per City public meeting notes unlikely to be built.					
Puyallup River Trail	Construct a Class I trail along the southern side of the Puyallup River.							Lack of access across the Puyallup River to the south (excepting bridge at Inter Ave E).					
Trail Connection to Station	Connect the station to the trail along the Puyallup River.							Connections via State/Traffic Streets.					
E Main St Overpass Widening	Widen E. Main St overpass over SR 410 to connect to the Puyallup and Foothills trails.							No such overpass.					
Priority Transit Lanes	Add priority lanes for transit to alleviate access issues, specifically for Route 496, connector service from the Bonney Lake park-and-ride.							Question of routes and projects supported by Pierce Transit.					
Improved Transit Access	Improve transit access opportunities by removing a visual obstruction from the rail control box that currently prohibits buses travelling northbound from making the left turn onto Maple Street to cross the railroad tracks.							Question of routes and projects supported by Pierce Transit.					

Puyallup Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
2nd St SW Sharrow/ Bicycle Boulevard (1)	Bicycle boulevard, including signage, on 2nd St SW starting at E Main ending at 9th Ave SW (0.05-.55 miles from station)							(see cost estimates and Tool results)	(see Tool results)	This connection would provide direct access to the station for employment land uses to the south (there is little existing residential in this area).	Quicker travel time for bikes to and from the station.	Partner with City on improvements.	Would facilitate biking to and from the station.
Station Area Crosswalk Improvements (2)	Improve crosswalks to meet ADA standards: - 2nd St SW from W Main Ave to 4th Ave SW - 3rd St SW from W Main Ave to 4th Ave SW - W Stewart Ave at 3rd St NW and 2nd St NW - 5th St SW at 2nd/3rd Ave NW (all less than 0.25 miles from station)							"	"	Improves existing sidewalk infrastructure to ADA standards which is otherwise in acceptable condition and continuous.	Enhances safety and facilitates crossing for these users.	"	No significant change.
Railroad Crossing Improvements (3)	Improve railroad crossings at S Meridian and 5th St SW to meet ADA standards: - Crosswalks and ramps along 2nd St SW, 3rd St SW and 5th St SW - Crossing enhancement at 3rd St SE/tracks - Visually impaired assistance at Meridian and 3rd St SE RR crossings (0.04-0.08 miles from station)							"	"	Improves station circulation but does not especially leverage existing investment besides the Sounder station itself.	"	"	"
4th St NW Bike Lane (4)	Addition of bike lane including signage on 4th from trail to W Stewart Ave (0.08-0.64 miles from station)							"	"	This North/South connection would link the station to the existing trail south of the Puyallup River.	Quicker travel time for bikes to and from the station.	"	Would facilitate biking to and from the station.
W Main Ave Sharrows and Bike Lanes (5)	Addition of sharrows and bike lanes including signage on 7th St NW to 5th St SE. (0-0.29 miles from station)							"	"	Connects to proposed North/South bike lanes along 7th St SW. Fills a gap in the existing bicycle system network for access to the station.	"	"	"

Project Name (Map ID)	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
7th Ave Bike Lanes and Sharrows (6)	Addition of bike lanes and sharrows including signage on 7th Ave from 18th St SW to 21st St SE (0.38-1.44 miles from station)							"	"	This long East/West connection would link neighborhoods southwest and southeast of the station to proposed North/South bicycle facilities, making a complete bicycle system network to access the station.	"	"	"
Parking Garage – Large (Not Shown on Map)	Construct a 490 stall garage at existing Sounder lot south of tracks (at station)							"	"	"	Would offer maximum additional parking spaces.	Coordinate on parking plan for area.	Low benefit; maximum increase of SOVs possible.
Parking Garage – Medium (Not Shown on Map)	Construct a 400 stall garage at existing surface lot near library (at station)							"	"	Reduces the effectiveness of existing non-SOV station access improvements and requires the removal of existing surface parking built by Sound Transit.	Would offer moderate number of additional parking spaces.	"	Low benefit; may increase SOVs.
7th St SW Bicycle Boulevard (7)	Bicycle boulevard, including signage, from 7th St SW from Fairview Dr to W Main Ave. (0.26-0.78 miles from station)							"	"	This North/South connection would provide direct access to the station for housing and employment land uses along this segment.	Quicker travel time for bikes to and from the station.	Partner with City on improvements.	Would facilitate biking to and from the station.
Station Pedestrian Bridge (8)	Construct a bridge over the railroad tracks half way between 2nd St NW on the north and 3rd St SW on the south (at station)							"	"	Improves station circulation but does not especially leverage existing investment besides the Sounder station itself	Shorter travel time for passengers; reliable way to cross tracks.	Coordinate on land use plans for area.	No significant change.
Parking Garage – Small (Not Shown on Map)	Construct a 255 stall garage at W Stewart N Meridian (at station)							"	"	Reduces the effectiveness of existing non-SOV station access improvements and possibly requires the removal of existing surface parking built by Sound Transit.	Would offer additional parking spaces, less than medium or large options.	Coordinate on parking plan for area.	Low benefit; may increase SOVs but not as much as medium or large options.
21st Ave NW to 4th St NW Bike Boulevard (9)	Bicycle boulevard, including signage, starting at 21st Ave NW heading east on 10TH Ave NW, then heading south on 13th St NW, then heading east on 7th Ave NW ending at 4th St NW (0.25-1.25 miles from station)							"	"	This long East/West connection would link neighborhoods northwest of the station to proposed North/South bicycle facilities, making a complete bicycle system network to access the station.	Quicker travel time for bikes to and from the station.	Partner with City on improvements.	Would facilitate biking to and from the station.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Turning Radius Improvements <i>(10)</i>	Reconstruct the corner of 5th St and W Pioneer Ave to accommodate bus traffic. Improve the right hand turn from SB 5th St SW on to WB W Pioneer Ave (0.16 miles from station)	—						”	“	Improves operations of transit service	Increased ease of use for bus drivers accessing and leaving the station area.	Partner with City and Pierce Transit on improvements.	No significant change.
Real-time Arrival Signs <i>(Not Shown on Map)</i>	Install real-time signage posting train information (at station)	N/A						N/A	Would not increase ridership.	No previous ITS components at station to leverage.	Consistent way for users to know where their train stops.	Could partner with other users of the station (Pierce Transit).	”
Drop-Off Capacity Improvements <i>(Not Shown on Map)</i>	Increase the drop-off capacity by 10 spaces (at station)	N/A						”	“	Expands upon existing kiss-and-ride capacity and ensures buses in mixed traffic are not impacted. Supports additional ridership created through expansion of kiss-and-ride capacity.	No significant change.	Partner with City on improvements.	”
Parking Pricing <i>(Not Shown on Map)</i>	Implementation of parking pricing (at station)							”	”	Improves the ability to shift demand to underutilized stations and encourages non-SOV access modes.	May discourage some users allowing more available space.	Coordinate on parking plan for area.	May encourage more people to car/vanpool.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
Meridian St Awnings	Construct awnings at various locations on Meridian St.							Doesn’t provide new non-motorized connections.					
East Foothills Trail Bike Path	Shared use path on the East Foothills Trail 134th Ave E to the Puyallup Riverfront Trail at the easterly city limits							Unlikely to affect ridership due to distance from the station.					
Puyallup River Bike Path	Shared use bike path on the Puyallup Riverfront Trail from western terminus of the existing trail to the Puyallup city limits. Shared use bike path on the Puyallup Riverfront Trail from the eastern terminus of the existing trail to the Sumner city limits at the Puyallup River							Project is complete.					
Bicycle Facility Study	Conduct a detailed near-term bicycle facility study for the greater vicinity of the station, to include identifying potential upgrades for bike routes serving the station, connections to existing routes/trails, and related bicycle-serving improvements							Not a capitol project.					
BRT and Transit Priority Infrastructure	Construct infrastructure to support BRT and Transit from 176th to downtown Puyallup via SR 161							Question of routes and projects supported by Pierce Transit.					
Restroom Construction	Construct adequate restroom facilities at the station							Not a direct connection to ridership.					

Tacoma Dome Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
E K St/E Wright Ave Bike Boulevard <i>(1)</i>	Bicycle boulevard, including signage, along E K St and E Wright Ave from McKinley Park to Pipeline Trail (0.58-1.41 miles from station)							(see cost estimates and Tool results)	(see Tool results)	This connects to the proposed Pipeline Trail and other North/South bicycle facilities.	Quicker travel time for bikes to the station.	Partner with City on improvements.	Facilitates biking to the station for neighborhoods to the south.
Puyallup Ave Crossing Improvement <i>(2)</i>	Construct crosswalks and add lighting for Puyallup Ave at E C St or E 22nd St. (0.19 miles from station)							"	"	Duplicates existing crossings which provide similar access route directness to station.	Increased ease and safety for pedestrians.	"	No significant change.
E L St Climbing Bike Lane/ Sharrow Combination & Bike Boulevard <i>(3)</i>	Addition of a climbing lane and sharrow combination from Puyallup Ave to E 29th St. Bike Boulevard and signage along E Upper Park Rd from E 29th St to E McKinley Ave. (0.38-0.46 miles from station)							"	"	This would provide a connection over Interstate 5 for bicycles, connecting the station to proposed bike lanes serving neighborhoods south of the station. Partly duplicates other facilities.	Quicker travel time for bikes to the station.	"	Facilitates biking to the station for neighborhoods to the south.
Bike lockers <i>(Not Shown on Map)</i>	Install 20 lockers (at station)							"	"	Provides end of trip facilities for trips encouraged by existing non-motorized facility investments.	Increased ease and availability of bike storage.	Could partner with other users of the station (Pierce Transit).	Encourages more people to arrive at the station by bike.
Puyallup Ave Bike Lanes <i>(4)</i>	Addition of bike lanes and signage along Puyallup Ave from S C St to Milwaukee Way (0-1.14 miles from station, 2010 Mobility Master Plan)							"	"	This long connection would link the station area to existing East/West bike lanes on Eells St/Pacific Highway E, closing a gap in bicycle access to the station for east Tacoma.	Quicker travel time for bikes to the station.	Partner with City on improvements.	Facilitates biking for employees and residents east of the station.
Portland Ave Bike Lanes <i>(5)</i>	Addition of bike lanes and signage along Portland Ave from Puyallup Ave to E to E 56th St (0.66-2.47 miles from station)							"	"	This long connection would allow bicyclists traveling from southern Tacoma to cross Interstate 5 and connect to proposed routes to the station. It would intersect with existing East/West bike lanes along E 48th St.	"	"	Facilitates biking to the station for neighborhoods to the south.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Pipeline Trail (6)	Construct a shared use path along Pipeline Rd from the E 40th St to Waller Rd (1.7-3.78 miles from station)							"	"	This long connection would connect southern Tacoma with the station via additional proposed bike lanes/trails. Would have little effect on pedestrians, as it would be more about 2 miles from the station.	"	"	"
Contribute to Parking Garage <i>(Not Shown on Map)</i>	400 stalls (of proposed 3,000 stall garage) (at station; 2010-2015 CTP)							"	"	Reduces the effectiveness of existing non-SOV station access improvements and possible requires the removal of existing parking areas built (in part) by Sound Transit.	Would offer additional parking spaces, making it easier to find a space.	Coordinate on parking plan for area.	No benefit; may increase SOVs.
Prairie Line Trail – Phase 2 (Water Ditch Trail Ext.) (7)	Construct a non-motorized vehicle trail along the Prairie Line Rail ROW from S 21ST to S Pine St (0.46-2.18 miles from station, Trans. 2040)							"	"	This rails-to-trails project would connect to Phase I of the trail, which goes north along Hood St through downtown Tacoma and connects to the Thea Foss Waterway trail. There are no intersecting North/South ped/bike facilities to feed into this trail.	Safer, quicker travel time for bikes; unknown demand.	Partner with PSRC and City on improvements.	May facilitate additional riders by ped/bike.
Station Pedestrian Bridge (8)	Construct a pedestrian bridge over the tracks in line with East E St from Freighthouse Square to E 26th St (at station)							"	"	This is an important component of the pedestrian corridor and overall Tacoma Dome District Development strategy.	Shorter travel time for passengers; reliable way to cross tracks.	Coordinate on land use plans for area.	No significant change.
Station Area Pedestrian Lighting (9)	Construct lighting between garages and Freighthouse Square. Focus on E 25th St crossing (at station)	N/A						N/A	Would not increase ridership.	Enhances existing pedestrian facilities; but amenities are unlikely to result in new riders.	Increased ease and safety for pedestrians.	Partner with City on improvements.	"
Real-time Parking Availability Signage <i>(Not Shown on Map)</i>	Install real-time parking availability information signage on major access route and parking guidance at garage. See "PARIS" from Puget Sound P&R System Update 2001 (at station)	N/A						"	"	Improves utilization and balance of existing parking capacity at a systems level.	Consistent way for users to know parking availability and change behavior accordingly	Could partner with other transit providers.	"
E G St Boarding Area and Layover Zone Improvements (10)	Expand the transit bus bay on G St adjacent to the station to increase passenger boarding areas and bus layover zones (Pierce Transit 2011)							"	"	Improves upon existing feeder transit service.	Quicker transfer times for transit users.	"	May generate additional feeder transit riders (as opposed to SOVs).

Project Name (Map ID)	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
E McKinley Way Bike Lanes (11)	Addition of bike lanes and signage along E McKinley Way from E D St to E 56th St. (0.4-2.3 miles from station)	N/A	○	●	●	●	●	”	”	This short connection would link existing bike lanes on E D St with proposed North/South bike lanes along E McKinley Ave.	Quicker travel time for bikes to the station.	Partner with City on improvements.	Facilitates biking to the station for neighborhoods to the south.
Parking Pricing (Not Shown on Map)	Implementation of parking pricing (at station)	N/A	○	◐	◐	●	◐	”	“	Provides end of trip facilities for trips encouraged by existing non-motorized facility investments.	May discourage some users, allowing more available space.	Coordinate on parking plan for area.	May encourage more people to car/vanpool.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
Fawcett Ave S Bike Boulevard	Bike boulevard from S 4th St to S 25th St. (0.5 miles from station)						Does not intersect with or provide a direct connection to the station.						
Puyallup Ave Pedestrian Improvements	Construct crossings between D St and I-705 (2008 Dome District Dev. Strategy). Pedestrian safe connections (crosswalk, lighting, etc.) for Puyallup Ave, East D & Puyallup Ave at Tacoma Dome Station						Viewed as potentially redundant to projects 1 and 5 above (that had more detail)						
Station Area Traffic Calming	Construct controlled crossings between Dome District and Thea Foss Waterway						Viewed as potentially redundant to projects 1 and 5 above (that had more detail)						
Cross County Commuter Connector Trail	Construct non-motorized trail from the station to the Foothills Trail in Orting (Trans. 2040)						Not a direct connection to ridership						
Water Ditch Trail TAC-40	Construct non-motorized trail along the Water Flume Line from A St to S 38 th St						Not a direct connection to ridership						
I-5 Trail Corridor	Construct a non-motorized trail along I-5 (Trans. 2040)						Not a direct connection to ridership						
Trail to the Mountain Trail	Construct a share use path from downtown Tacoma to Elbe (Trans. 2040)						Not a direct connection to ridership						
Foss East Waterfront Park Connection							Viewed as potentially redundant to projects 1 and 5 above (that had more detail)						
Local Improvement District (LID)	Potential LID with the LeMay – America’s Car Museum – participate with property owners to finance the extension of the streetlighting system along the frontage road						Not a direct connection to ridership						
E 25th St and Fawcett Improvements	Construct bike lanes along E 25th St from C St to Portland Ave; bicycle boulevard along Fawcett (2010 Mobility Master Plan)						Scheduled to be completed by the end of 2012; already funded.						
Prairie Line Trail Phase 1	Prairie Line Trail (Water Ditch Trail Extension) – non-motorized trail along the Prairie Line Rail ROW from S. Tacoma Way to the Thea Foss Waterway (Transportation 2040)						Project is complete						
Historic Water Ditch Trail	Historic Water Ditch Trail TAC-40 – non-motorized trail along the Water Flume Line from A St to S. 80th at S. Tacoma Way (Transportation 2040).						Project is complete						
E 23rd Bike Connection	Bicycle connection for E. 23rd to existing north/south Tacoma Dome Station bike lane (Tacoma Public Open House comment)						Scheduled to be completed by the end of 2012; already funded.						
D and L St Bike Lanes	Bike lanes on D St. should extend beyond I-5 bridge south, up McKinley to S. 38th. Likewise, bike lanes on L Street over I-5 to S. 38th (Tacoma Public Open House comment)						Addressed by projects 6, 7, and 10 above.						

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Bus Zone Improvements	Bus zone and queue jump improvements to benefit transit speed and reliability for services providing connections to the Tacoma Dome Station, especially at Pacific Ave/SR 7 at 112th (Pierce Transit 2011)	Not a direct connection to ridership											
Bus Bay Expansion	Expand the transit bus bay on G Street adjacent to the Tacoma Dome Station facility to increase passenger boarding areas and bus layover zones (Pierce Transit 2011)	Not a direct connection to ridership											

South Tacoma Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Sidewalks Improvements near Station (1)	- Construct a sidewalk on north side of S 60th St between RR tracks and tie into the sidewalk along S Tacoma Way - Construct sidewalks on both the north and south sides of S 58th St from S Washington St that tie into the sidewalk along to Tacoma Way - Improve the sidewalk on south side of S 56th St between S Adams St and S Tyler St to meet ADA standards. (0-0.36 miles from station)							(see cost estimates and Tool results)	(see Tool results)	Improves walking access to major destinations already improved by ST during station construction.	Enhances safety and facilitates crossing for these users.	Partner with City on improvements.	No significant change.
S 60th St Trail (2)	Construct trail from S Adams St to S Tyler St through Metro Parks Baseball Fields and along north edge of Grays Middle School. (0-0.29 miles from station)							“	“	This short East/West connection will provide pedestrian and bike access directly to the station from existing North/South sidewalks and bike lanes on S Tyler St.	Quicker, more direct travel time for both bikers and pedestrians.	“	Facilitates multi-modal access to the station.
S 58th St Non-Motorized Connection (3)	Construct a high quality walking and biking connection (part or cycle track) along S 58th St between S Washington St and S Fife St. (0-0.68 miles from station)							“	“	This East/West connection will provide needed pedestrian access for residents east of the station (current maps show poor connectivity in this area).	“	“	“
Bike lockers (Not Shown on Map)	8 lockers for long term storage and 4 racks (at station)							“	“	Provides end of trip facility. Existing bike parking capacity not sufficient to meet forecasted demand.	Increased ease and availability of bike storage.	Could partner with other users of the station (Pierce Transit).	Encourages more people to arrive at the station by bike.
S Tacoma Way Crossing Improvements (4)	- Improve signalized crossings at S 56th St to full ADA standards including premium place making elements such as textured pavement cross walks - Improve S 58th St to full ADA standards							“	“	Improves walking access to station and closes gap created by S Tacoma Way for non-motorized travel by building off investments the city and ST are making or have made on east side of roadway.	Enhances safety and facilitates crossing for these users.	Partner with City on improvements.	No significant change.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
	- Improve S 60th St crossing to full ADA standards with median refuge, lighting, and any other necessary ADA elements. (all less than 0.25 miles from station)												
S 56th St Crossing Improvements (5)	Improve the crosswalks at the intersection of S 56th St and S Washington St to meet ADA standards (0.03 miles from station)							“	“	Improves crossing for non-motorized access immediately adjacent to the station. Leverages other non-motorized investments.	“	“	“
S 54th St/S Railroad St Bike Boulevard (6)	Addition of bicycle boulevard and signage from S Washington St to Tacoma Mall Blvd (0.14-1.01 miles from station)							“	“	This connection, coupled with the freeway crossing improvements (below) would connect areas east of I-5 with the station.	Quicker travel time for bikers.	“	Facilitates biking to the station.
S Washington Way Bike Lanes (7)	Addition of bike lanes along S Washington Way from S 47th St to S 58th St (0-0.73 miles from station)							“	“	This North/South connection will provide access to the station for employees north of the station, and will also connect to bike lanes on S Tacoma Way.	Easier and safer travel for riders employed by the nearby business district.	Partner with City and possibly local business owners on improvements.	“
Water Ditch Trail TAC-40 (8)	Construct a non-motorized trail along the Water Flume Line from S 56th St to S 60th St (0.39-0.99 miles from station)							“	“	This long North/South trail will provide greater access to the station area for residents living southwest of the station. Portions of this trail have already been constructed.	Quicker travel time for bikers.	Partner with City on improvements.	“
Oaks St Bike Lane (9)	Addition of bike lanes and signage along Oaks St from S 66th St to S 47th St (0.72-0.85 miles from station)							“	“	This long North/South connection would provide access to the station via intersections with proposed facilities along S 66th St, S 58th St, and S 54th St.	More round-about way to the station; likely quicker routes available.	“	Facilitates biking to the station indirectly.
Station Area Access Improvements (10)	Construct and install street lighting, sidewalks and curb ramps between the South Tacoma Station and the business district near S 56th St (less than 0.25 miles from station; 2010-2015 CTP)							“	“	Closes a gap in non-motorized access to the station. It would connect the station to the business district near S 56th St.	Easier and safer travel for riders employed by the nearby business district.	Partner with City and possibly local business owners on improvements.	No significant change.

Project Name (Map ID)	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
S 66th St Bike Boulevard (11)	Addition of bicycle boulevard and signage along S 66th St from S Tacoma Way to S Wapato St (0.38-0.96 miles from station)							“	“	This East/West segment would connect to various existing and proposed North/South bike facilities, including the Water Ditch Trail and bike lanes along S Puget Sound Ave.	Quicker travel time for bikers.	Partner with City on improvements.	Facilitates biking to the station.
S 56th St Bike Lanes (12)	Addition of bike lanes along S 56th St from S Washington St to S Tyler St (0-0.35 miles from station)							“	“	Connects S Tyler St bike lanes to station. Lower performance if S 60 th St Trail is constructed.	“	“	“
S 66th St Sharrows (13)	Addition of sharrows on S 66th St from Lakewood Dr W to S Tyler St (0.51-1.15 miles from station)							“	“	Connects to North/South bike lanes on S Tyler St. Fills a gap in the existing bicycle system network for access to the station, especially for areas southwest of the station.	“	“	“
S 56th St and I-5 Interchange Crossings (14)	- Improve the freeway ramp crosswalks to full ADA standards - Increase visibility of crosswalk locations - Improve connection between the sidewalks on the north side of 56th St and S Railroad St Bike Boulevard (1.13 miles from station)							“	“	These improvements are targeted at bicyclists using the sidewalk, since 56th St is high volume/high speed and few cyclists would likely ride in traffic. Too far from the station to affect pedestrian ridership.	“	“	“
Parking Pricing (Not Shown on Map)	Implementation of parking pricing (at station)	N/A						N/A	Would not increase ridership.	Improves the ability to shift demand to underutilized stations and encourages non-SOV access modes.	May discourage some users, allowing more available space.	Coordinate on parking plan for the area.	May encourage more people to car/vanpool.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
Water Ditch Trail Phase III	Construct trail segments from the trail at Pine St to the planned Prairie Line trail near S C St and to the planned A St pedestrian tunnel at E 26th St							Closer to Tacoma Dome station					
I-5 Trail Corridor	Construction of a non-motorized trail along I-5 (Trans. 2040)							Not a direct connection to ridership					
Trail to the Mountain Trail	Construct a shared use path from downtown Tacoma to Elbe (Trans. 2040)							Not a direct connection to ridership					
Bike Connection to University Place	Addition of bike lanes from the Station to University Place							We understand that from University Place to 56th Street is okay and then difficult to get to station. Riders should look to S Tyler St for bike lanes and proposed connection to station via 56th St.					
Intersection Improvements	Install pavement cross-hatching and ADA ramps at all intersections on S Tacoma Way between S 47th and S 66th and at S 56th St intersections from S Orchard to Pine St (Tacoma Public Open House comment)							See projects 1-4 above for more detail					
Water Ditch Trail Extension	Historic Water Ditch Trail TAC-40 – non-motorized trail along the Water Flume Line from A St to S 80th St at S Tacoma Way (Transportation 2040)							Project is complete					

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Wayfinding Signs	Connect Water Ditch Trail to Sounder Link with wayfinding signs (Tacoma Public Open House comment)							Not a capitol project					
Improved Bus Stop Zones	Install improved bus stop zones at the two bus stops on S 56th St adjacent to the station with shelters and pedestrian amenities (Pierce Transit 2011)							Not a direct connection to ridership					
Transit Improvements	Identify, design, and implement transit signal priority and/or lane improvements that would benefit connections from the new University Place Town Center park-and-ride facility to the station (Pierce Transit 2011)							Not a capitol project					

Lakewood Station

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
47th Ave SW Sidewalk (1)	Addition of a sidewalk along the east side of 47th Ave SW from 108th St SW to 111th St SW (0.2-0.41 miles from station)							(see cost estimates and Tool results)	(see Tool results)	When coupled with other pedestrian-oriented projects, would provide safe access to the station for pedestrians. A future project related to this proposal is a connection to the nearby Lakeview Elementary School.	Quicker, easier, safer travel for pedestrians to the station.	Partner with City on improvements.	Facilitates walking to the station.
Lakeview Ave SW Sidewalk (2)	Expand the sidewalk at the corner of 108th St SW and Lakeview along the west side of Lakeview Ave SW from 108th St SW to 112th St SW (0.18-0.38 miles from station)							"	"	Connects to existing sidewalks on 108th St SW with planned non-motorized bridge station.	"	"	"
47th Ave SW Bike Boulevard (3)	Addition of a bicycle boulevard, including signage, from McChord Dr SW to Pacific Hwy SW with a new non-motorized link between 124th St Ct SW and 127th St Ct SW (0-0.88 miles from station)							"	"	This road has no outlet and likely has very low volumes. Sidewalks appear unnecessary with the roadway acting like a shared space. A non-motorized connection through the currently wooded area would make this an idea bike shared use/bike boulevard road.	Quicker, easier travel time for bikers.	"	Facilitates biking to the station.
111th/112th St SW Sidewalk (4)	Expand the sidewalk on the south side of 112th to meet with 111th to form a continuous sidewalk from Bridgeport Way SW to Lakeview Ave SW (0.2-0.32 miles from station)							"	"	Closes a gap in pedestrian access to the station, particularly for residents northeast of the station. This is a primary access route to planned non-motorized bridge at the station.	Quicker, easier travel for pedestrians to the station.	"	Facilitates walking to the station.
111th St SW/ Lakeview Ave SW Sharrows (5)	Addition of sharrows where 111th St SW and Lakeview Ave SW converge. On Lakeview Ave SW, from 108th St SW to 111th St SW. On 111th St SW, from 112th St SW to Lakeview Ave SW. (0.2-0.38 miles from station)							"	"	Would connect to existing bike lanes on 108th St SW with planned pedestrian bridge at station.	Quicker travel time for bikes to the station.	"	Facilitates biking to the station.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Bike lockers <i>(Not Shown on Map)</i>	4 lockers for long term storage and 4 racks (at station)							“	“	Provides end of trip facility. Existing bike parking capacity not sufficient to meet forecasted demand.	Increased ease and availability of bike storage.	Could partner with other users of the station (Pierce Transit).	Encourages more people to arrive at the station by bike.
Bridgeport Way SW Sidewalk <i>(6)</i>	Addition of a sidewalk on the east side of Bridgeport Way SW from SB Interstate 5 Exit to McChord Dr SW (0.42-0.91 miles from station)							”	”	Extends newly constructed sidewalk across I-5 into the Springbrook neighborhood.	Provides safer pedestrian and bicyclist access to station area on this busy, high speed road.	Partner with City on improvements.	Facilitates multi-modal access to the station.
112th St SW Bike Lanes <i>(7)</i>	Addition of bike lanes including signage and re-striping of 112th St SW from Gravelly Lake Drive SW to 111th St SW (0.24-1.05 miles from station, 2009 N-M. Trans. Plan)							”	”	This long East/West connection would link to proposed sharrows on Gravelly Lake Dr SW and Bridgeport Way SW. Primary access route to planned non-motorized bridge from east and central Lakewood.	Quicker travel time for bikes to the station from the northwest; dependent upon access to Pacific Highway SW.	“	Facilitates biking to the station.
Main St Sharrows <i>(8)</i>	Addition of sharrows on Main St from Gravelly Lake Dr SW to 112th St SW (0.69-1.17 miles from station)							”	”	When coupled with other proposed bicycle facilities, would provide access to the station for the nearby commercial area.	Quicker travel time for bikers using commercial area.	Partner with City on improvements.	Facilitates biking to the station.
Bridgeport Way SW Sharrows <i>(9)</i>	Addition of sharrows on Bridgeport Way SW from McChord Dr SW to Gravelly Lake Drive SW (0.22-1.58 miles from station)							”	”	Limited leveraging of previous investments and quality of connection is low due to vehicle volumes and speed.	“	“	“
Real-time Parking Availability Signage <i>(Not Shown on Map)</i>	Install real time parking availability information signage on major access route and parking guidance at garage. See “PARIS” from Puget Sound P&R System Update 2001 (at station)	N/A						N/A	Would not increase ridership.	Improves utilization and balance of existing parking capacity at a systems level.	Consistent way for users to know parking availability and change behavior accordingly.	Could partner with other transit providers.	No significant change.
Parking Pricing <i>(Not Shown on Map)</i>	Implementation of parking pricing (at station)	N/A						”	“	Improves the ability to shift demand to underutilized stations and encourages non-SOV access modes. Parking demand forecast is roughly in line with capacity, thus demand management may not be necessary.	May discourage some users, allowing more available space.	Coordinate on parking plan for the area.	May encourage more people to car/vanpool.

Project Name <i>(Map ID)</i>	Project Description	Rating: (Low/Medium/High)						Rational: Summary of why rating was selected					
		Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits	Cost Effectiveness (cost/new rider)	Increases Ridership	Leverages Previous Investments	Decreases Travel Time, Increases Reliability	Partnership Potential with other agencies	Environmental Benefits
Expand Drop-Off Capacity <i>(Not Shown on Map)</i>	Increase the drop-off capacity by 11 spaces (at station)	N/A	○	●	○	●	○	“	“	Increases ridership potential with limited public investment	No significant change.	Partner with City on improvements.	No significant change.
The following projects have been removed from further consideration and are not shown on the map in Chapter 5													
Gravelly Lake Dr SW Sharrows	Addition of sharrows on Gravelly Lake Dr SW from Bridgeport Way SW to 112th St SW						Project has been completed						
Interlaken Drive SW Sharrows	Addition of sharrows on Interlaken Dr SW from 104th St SW to Gravelly Lake via Mt Tacoma Dr SW / Motor Ave to 104th St SW.						Too far from the station						
Gravelly Lake Trail	Construct a pedestrian and bike trail around Gravelly Lake on Gravelly Lake Drive and Nyanza Drive (2011-2016 CTP)						Likely too far from the station to affect ridership; transportation benefit of this project is mixed.						
Pacific Highway SW Sidewalk	Addition of a sidewalk along Pacific Highway SW from McChord Drive SW to Bridgeport Way SW (2009 N-M. Trans. Plan)						Too far from the station						
McChord Drive SW Sidewalk	Addition of a sidewalk along McChord Drive SW from Pacific Highway SW to Bridgeport Way SW (2009 N-M. Trans. Plan)						Too far from the station						
Pacific Highway SW Bike Lanes	Addition of bike lanes and signage from Bridgeport Way SW to Gravelly Lake Drive SW (2009 N-M. Trans. Plan)						Project has been completed						
108th St SW Bike Lanes	Addition of bike lanes and sign age and restriping from Bridgeport Way SW to Lakeview Ave SW (2009 N-M. Trans. Plan)						Project has been completed						
City Water Ditch Trail	Construct a trail from Tacoma City limits to 84th St S (Trans. 2040)						This project will not provide adequate service to the station for the majority of the user group. The project is too detached from the station location.						

Appendix I
Preliminary Cost Estimates for Potential Improvement Projects

29-May-12

SOUNDER STATION COST ESTIMATES - DRAFT

	MUKILTEO STATION	Unit	Unit Cost	Total	Comment
-	Bike Lockers	4	\$3,000	\$12,000	
1	Waterfront Pedestrian Bridge				
2	Shoreline Trail	8 miles	\$27,000	\$216,000	2009 Bicycle, Ped & Trails Plan
	Parking Garage and	100 stalls	\$36k - 44k	\$3.6-4.4 million	
-	Pedestrian Bridge	80 lf	\$43,750- 62,500	\$3.5-5 million	
3	Waterfront Promenade	0.4 miles	Est.cost	\$4.75 million	"
4	Japanese Gulch Trail	2.5 miles	Est.cost	\$2.4 million	"
-	Pedestrian Wayfinding	8 each	\$5,000	\$40,000	
-	Parking Pricing				

	KENT STATION	Unit	Unit Cost	Total	Comment
1	Gowe St. Sidewalks	1,200 lf	\$20	\$24,000	
-	Bike Lockers	5	\$3,000	\$15,000	
2	Mill Creek Pedestrian Bridge	250 sq ft	\$80-150	\$20k-37,500	
3	Reiten Road Sidewalks	2,000 lf	\$20	\$40,000	
4	1st Ave Bike Lane/Sharrows	5,000 lf	\$5	\$25,000	
5	James St/S 240th Sharrows	12,000 lf	\$5	\$60,000	
6	Reiten Rd Sharrows	9,000 lf	\$5	\$45,000	
7	Gowe St/Titus St Bike Lane/Sharrows	9,000 lf	\$5	\$45,000	
8	Smith St/Lincoln Ave Intersection Improvement	LS	\$300,000	\$300,000	
-	Real-time Arrival Signs				
-	Expand Drop-Off Capacity	10 ea	\$10,000	\$100,000	

	AUBURN STATION	Unit	Unit Cost	Total	Comment
1	A St SE Trail	8,000 lf	\$5	\$40,000	
2	A St NE Bike Wayfinding and Bike Boulevard	3,000 lf	\$25	\$75,000	
3	C St SW Trail	2,500 lf	\$20	\$50,000	
4	A St SW Bike Lanes	3,000 lf	\$5	\$15,000	
5	W Main St Bike Lanes	10,000 lf	\$5	\$50,000	
6	2nd St SW Bike Lanes	5,000 lf	\$5	\$25,000	
7	R St NE Bike Lanes	5,000 lf	\$5	\$25,000	
-	Parking Garage	300 stalls	\$20k-25,333	\$6-7.6 million	Assumes 3 levels
-	Bike Lockers	20 ea	\$3,000	\$60,000	

	SUMNER STATION	Unit	Unit Cost	Total	Comment
1	Linden Drive/SR 410 Crossing Impr.	520 lf	\$100	\$53,000	
2	Academy St Bike Boulevard	2,700 lf	\$50	\$113,500	
3	Puyallup River Trail Extension	2,500 lf	\$50	\$125,000	
-	Bike lockers	20 ea	\$3,000	\$60,000	
4	Riverwalk Trail Access Point	250 lf	\$50	\$12,500	
5	White River Trail Extension	2,500 lf	\$50	\$125,000	
6	Station Pedestrian Bridge	1	\$3-4 million		
-	Parking Garage - Large	450 stalls	\$16,667-22,222	\$7.5-10 million	2-bay=3 levels 3-bay=2 levels
-	Parking Garage - Small	150 stalls	\$20k-26,667	\$3-4 million	4 levels
-	SR-410 Non-Motorized Bridge	180 lf	\$36,111-55k	\$6.5-9.9 million	

	PUYALLUP STATION	Unit	Unit Cost	Total	Comment
1	2nd St SW Sharrow / Bike Blvd	<i>2,700 lf</i>	\$10	\$27,000	
2	Station Area Crosswalk Improvements	ls	\$150,000	\$150,000	3 crosswalks
3	Railroad Crossing Improvements	ls	\$200,000	\$200,000	
4	4th St NW Bike Lane	<i>3,200 lf</i>	\$5	\$16,000	
5	W Main Ave Sharrows and Bike Lane	<i>3,700 lf</i>	\$5	\$18,500	
6	7th Ave Bike Lanes and Sharrow	13,200 lf	\$5	\$66,000	
-	Parking Garage - Large	490 stalls	\$16,735-21,633	\$8.2-10.6 million	
-	Parking Garage - Medium	400 stalls	\$18k-23k	\$7.2-9.2 million	
7	7th St SW Bicycle Boulevard	<i>3,700 lf</i>	\$10	\$37,000	
8	Station Pedestrian Bridge	1,560 sq ft	\$1,410-2,115	\$2.2-3.3 million	
-	Parking Garage - Small	225 stalls	\$33,333-41,778	\$7.5-9.4 million	
9	21st Ave NW to 4th St NW Bike Blvd	<i>7,500 lf</i>	\$10	\$75,000	
-	Real-time Arrival Signs				
-	Turning Radius Improvements				

	TACOMA DOME STATION	Unit	Unit Cost	Total	Comment
1	E K St/Wright Ave Bike Boulevard	6,000 lf	\$10	\$60,000	
2	Puyallup Ave Crossing Improvement	ls	\$100,000	\$100,000	
3	E L St Climbing Bike Lane/Sharrows Combo & Bike Blvd	8,000 lf	\$10	\$80,000	
3a	Bike Lockers	20 ea	\$3,000	\$60,000	
4	Puyallup Ave Bike Lanes	20,000 lf	\$5	\$100,000	strip
5	Portland Ave Bike Lanes	16000	\$5	\$80,000	strip
6	Pipeline Trail	1000 lf	\$50	\$50,000	
6a	Contribute to Parking Garage	400 stalls	\$11,750-16,250	\$4.7-6.5 million	
7	Prairie Line Trail - Phase 2	12,000 lf	\$50	\$600,000	
8	Station Pedestrian Bridge Short Span Long Span	600 sq ft 1260 sq ft	\$2,500-4,667 \$2,460-4,603	\$1.5-2.8 million \$3.1-5.8 million	
9	Station Area Pedestrian Lighting	ls	\$50,000	\$50,000	
9a	Real-time Parking Availability Signs				
10	E G St Boarding Area and Layover Zone Improvements				
11	E McKinley Way Bike Lanes	10,000 lf	\$5	\$50,000	strip

	SOUTH TACOMA STATION	Unit	Unit Cost	Total	Comment
1	Sidewalk Improvements near Station	1,400 sy	\$35	\$49,000	5' wide
2	S 60th St Trail	2,000 lf	\$50	\$100,000	
3	S 58th St Non-Motorized Connection	4,000 lf	\$50	\$200,000	
-	Bike Lockers	8 ea	\$3,000	\$24,000	
4	S Tacoma Way Crossing Impr.	ls	\$100,000	\$100,000	
5	S 56th St Crossing Improvements	ls	\$100,000	\$100,000	
6	S 54th St/S Railroad St Bike Blvd	5,000 lf	\$10	\$50,000	
7	S Washington Way Bike Lanes	8,000 lf	\$5	\$40,000	
8	Water Ditch Trail TAC-40	8,000 lf	\$50	\$400,000	5' wide gravel
9	Oaks St Bike Lane	120,000 lf	\$5	\$60,000	strip
10	Station Area Access Improvements	ls	\$200,000	\$200,000	
11	S 66th St Bike Boulevard	4,000 lf	\$10	\$40,000	signed
12	S 56th St Bike Lanes	4,000 lf	\$50	\$200,000	
13	S 66th St Sharrows	8,000 lf	\$5	\$40,000	
14	S 56th St and I-5 Interchange Crossings				

	LAKEWOOD STATION	Unit	Unit Cost	Total	Comment
1	47th Ave SW Sidewalk	300 sy	\$35	\$10,500	5' wide
2	Lakeview Ave SW Sidewalk	500 sy	\$35	\$18,500	5' wide
3	47th Ave SW Bike Boulevard	5,000 lf	\$10	\$50,000	
4	111th/112th St SW Sidewalk	1,200 sy	\$35	\$42,000	5' wide
5	111th St SW Lakeview Ave SW Shar	2,000 lf	\$5	\$10,000	sharrow
-	Bike Lockers	4 ea	\$3,000	\$12,000	
6	Bridgeport Way SW Sidewalk	2,200 sy	\$35	\$77,000	5' wide
7	112th St SW Bike Lanes	10,000 lf	\$5	\$50,000	stripping
8	Main St Sharrows	4,000 lf	\$5	\$20,000	sharrow
9	Bridgeport Way SW Sharrows	10,000 lf	\$5	\$50,000	sharrow
-	Real-time Parking Arrival Signs				

Appendix J
Caltrain and Metrolink Technical Memorandum

Technical Memorandum – Caltrain and Metrolink Information

Comparisons between Sounder service and other commuter rail systems in the U.S. are needed to analyze access, future station area population growth, and employment forecasts are needed to determine future demand.

Commuter Rail Operations

When comparing future scenarios for station access demand and employing the Sound Transit Access Tool, local commuter rail operations and station area demographic and mode-of-access characteristics are compared to other commuter rail systems in the U.S. The context of this comparison is important:

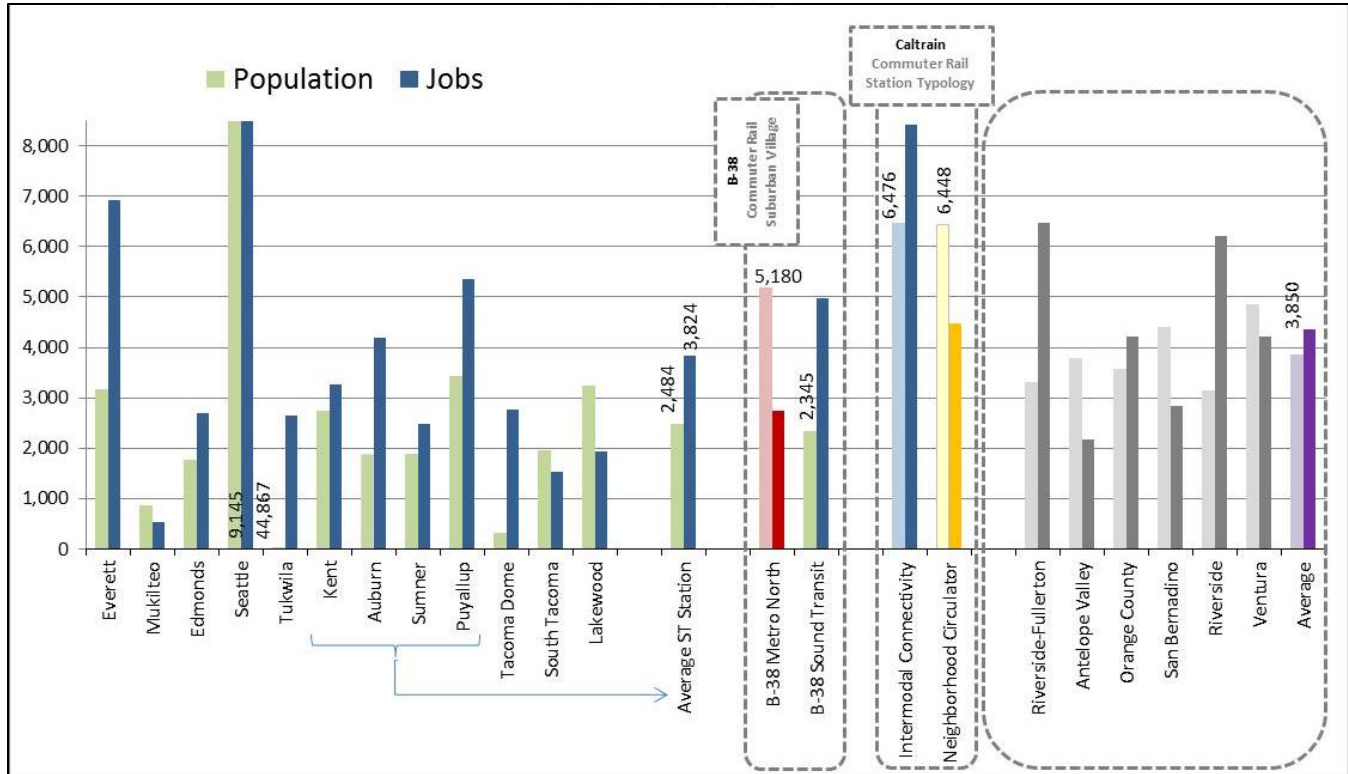
- Sounder commuter service is relatively young but productive, having only begun service in the last decade.
- Sound Transit commuter rail route mileage is similar to San Francisco (Caltrain). While its weekday ridership is roughly 25% of Caltrain's, its ridership per operational mile exceeds that of Los Angeles (Metrolink) and other large U.S. city services.
- Sound Transit service is largely oriented to downtown Seattle.
- There is no mid-day service.
- Caltrain and Metrolink (as well as other U.S. commuter rail systems) provide bi-directional and mid-day service, with multiple commuter destinations.
- U.S. commuter rail station area characteristics, as input to the Sound Transit Access Tool (Suburban Village and Suburban TOD typologies), are derived from New York and Sound Transit samples (supplemented with additional Los Angeles and San Francisco data).
- Caltrain charges for parking at its stations north of San Jose Diridon Station.

Station Area Population and Employment

In addition to service hours and orientation, station area population and employment/housing mix are among key determinants in station area passenger demand.

- Sounder stations (Figure 1) currently have lower population densities within ½ mile of the station (2,484—an average of the station areas for Kent, Auburn, Sumner and Puyallup) than similar station types in the Caltrain and Metrolink systems.
- Sampling input to the Sound Transit Access Tool is based on U.S. stations with a significantly higher population density within ½ mile of the commuter rail station (Suburban Village – 5,180; Suburban TOD – 5,065).
- Kent, Auburn, Sumner and Puyallup Stations have a larger number of jobs in the station-area rather than residences.
- Figure 1 data are based on 2000 and 2008 U.S. Census data.

Figure 1: Commuter Station Population and Employment Density



Average ridership statistics from commuter rail stations within the Caltrain (San Francisco area) and Metrolink (LA area) were applied to Sound Transit's future 2030 passenger demand estimate of each station. Figures showing these estimates are provided for each station in the Station-by-Station Access Summary section. There are several system characteristics and land use density/mix conditions that explain the significantly higher non-auto mode access to commuter rail in the Caltrain projections when compared to the Sound Transit projections for 2030. The 2030 population/employment projections used for each commuter rail station system type are listed below:

1. **2030 Caltrain Interconnectors:** population of 6,475; employment of 8,425.
2. **2030 Caltrain Neighborhood Circulator:** population of 6,450; employment of 4,475.
3. **2030 Metrolink (non-city center):** population of 3,850; employment of 4,350.

The following station-by-station scenarios were modeled to further verify 2030 estimates of Sounder ridership using the Access Tool and the ST Fare Model under current land use plans and potential TOD land use patterns.

Station-by-Station Access Summary

Mukilteo Station

Figures 2 to 4 present future scenarios for Mukilteo Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 2: 2030 Caltrain Interconnectors

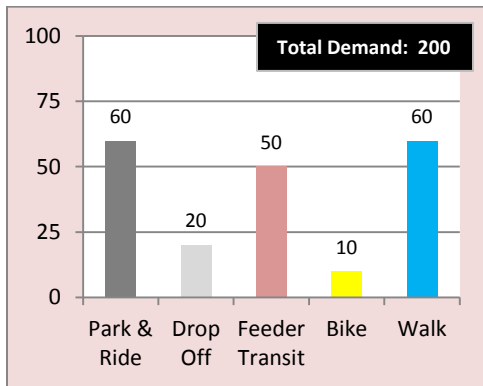


Figure 3: 2030 Caltrain Neighborhood Circulator

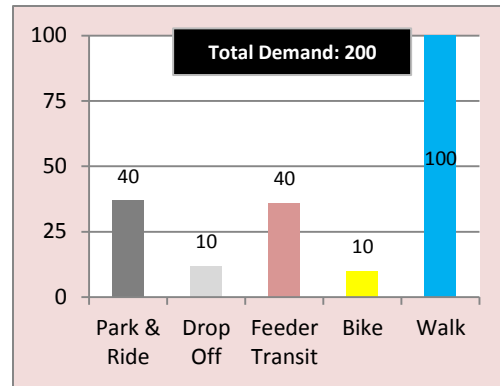
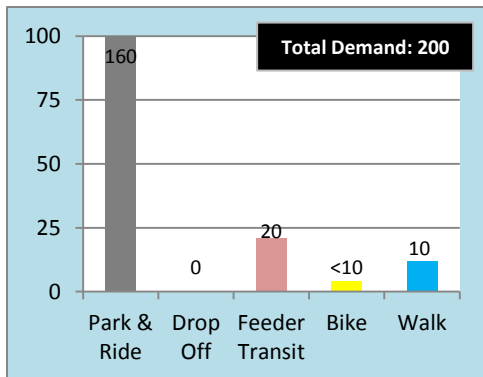


Figure 4: 2030 Metrolink



Kent Station

Figures 5 to 7 present future scenarios for Kent Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 5: 2030 Caltrain Interconnectors

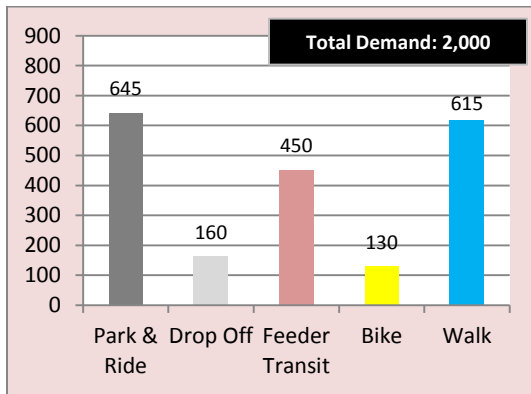


Figure 6: 2030 Caltrain Neighborhood Circulator

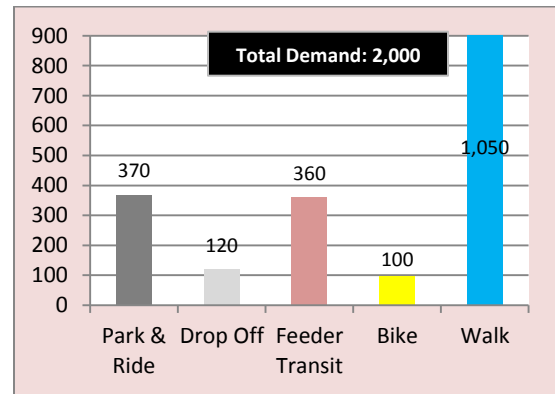
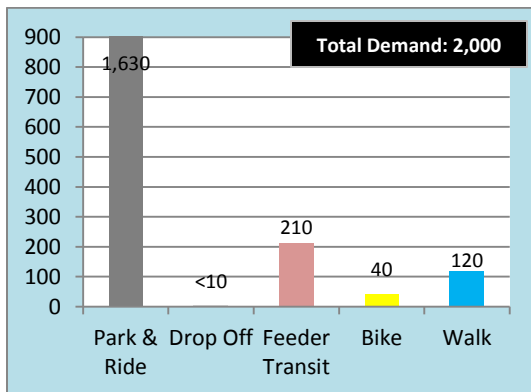


Figure 7: 2030 Metrolink



Auburn Station

Figures 8 to 10 present future scenarios for Auburn Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 8: 2030 Caltrain Interconnectors

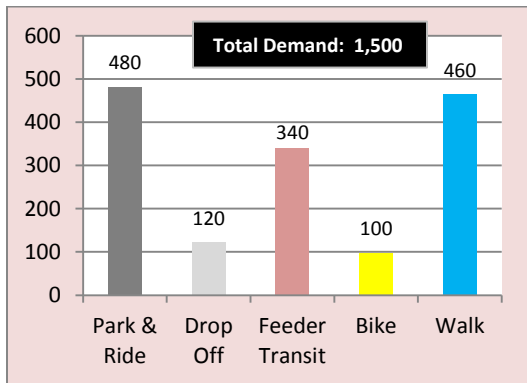


Figure 9: 2030 Caltrain Neighborhood Circulator

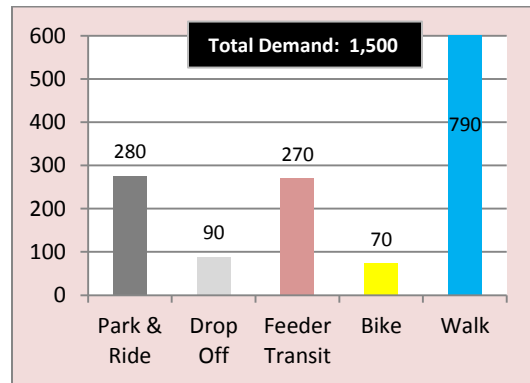
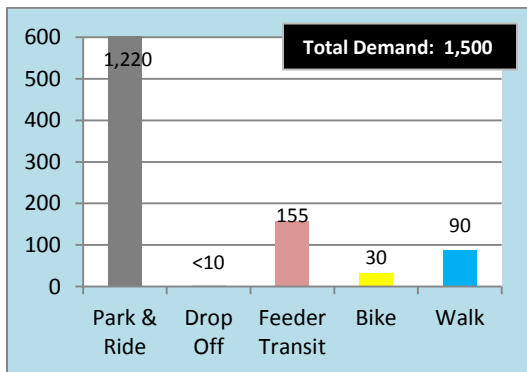


Figure 10: 2030 Metrolink



Sumner Station

Figures 11 to 13 present future scenarios for Sumner Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 11: 2030 Caltrain Interconnectors

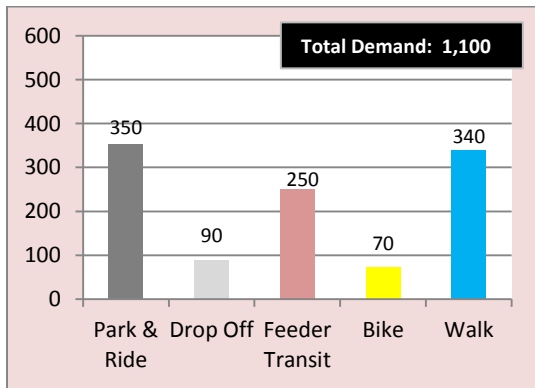


Figure 12: 2030 Caltrain Neighborhood Circulator

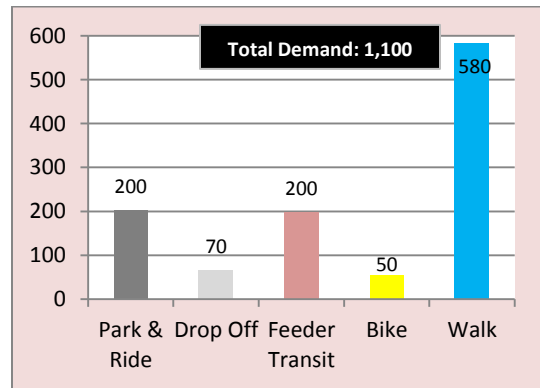
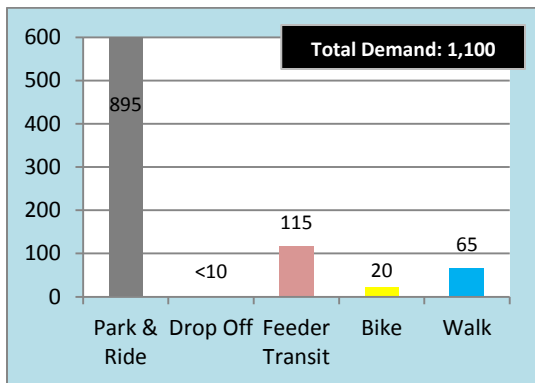


Figure 13: 2030 Metrolink



Puyallup Station

Figures 14 to 16 present future scenarios for Puyallup Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 14: 2030 Caltrain Interconnectors

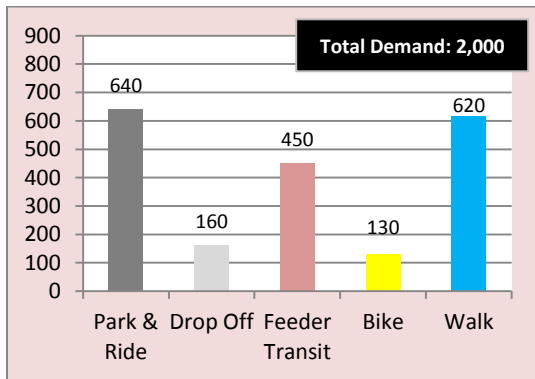


Figure 15: 2030 Caltrain Neighborhood Circulator

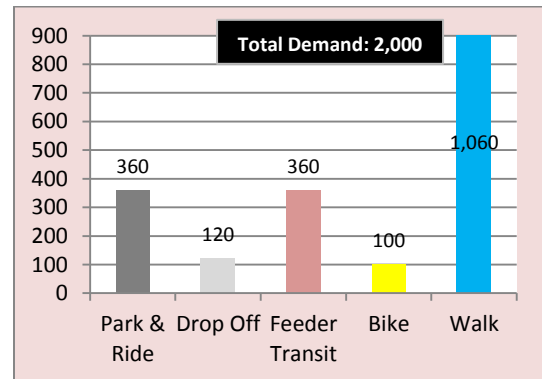
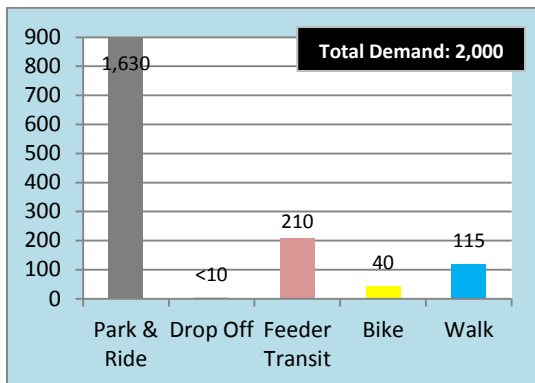


Figure 16: 2030 Metrolink



Tacoma Dome Station

Figures 17 to 19 present future scenarios for the Tacoma Dome Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 17: 2030 Caltrain Interconnectors

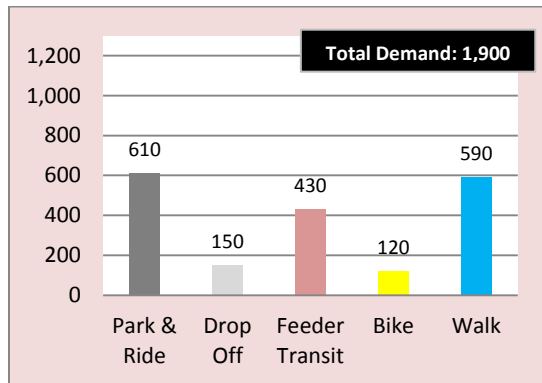


Figure 18: 2030 Caltrain Neighborhood Circulator

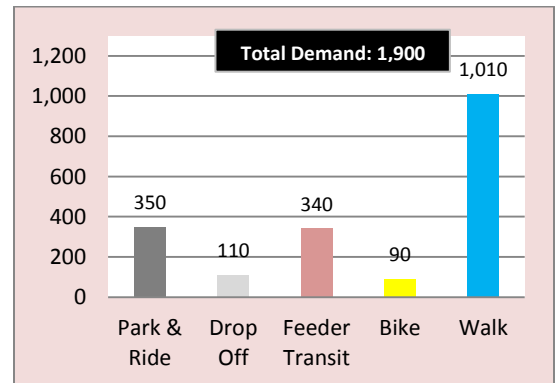
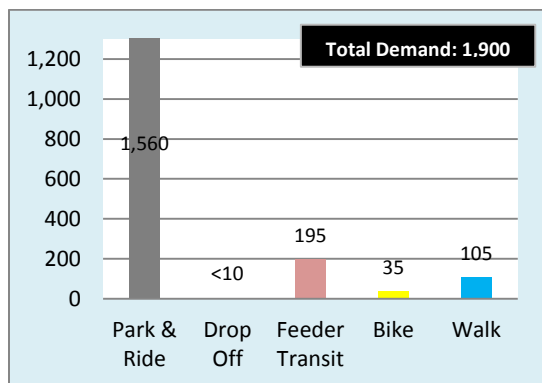


Figure 19: 2030 Metrolink



South Tacoma Station

Figures 20 to 22 present future scenarios for the South Tacoma Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 20: 2030 Caltrain Interconnectors

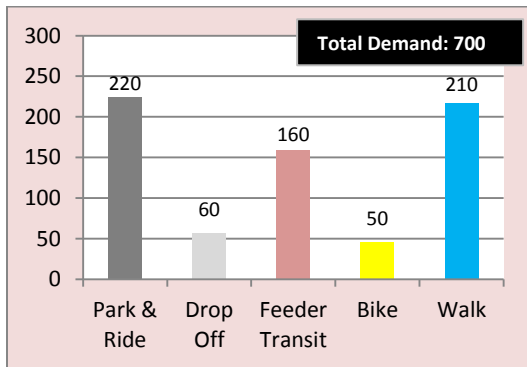


Figure 21: 2030 Caltrain Neighborhood Circulator

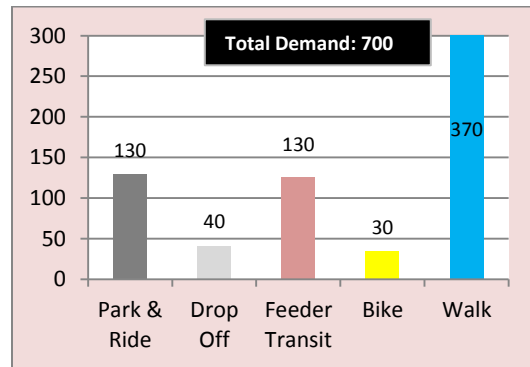
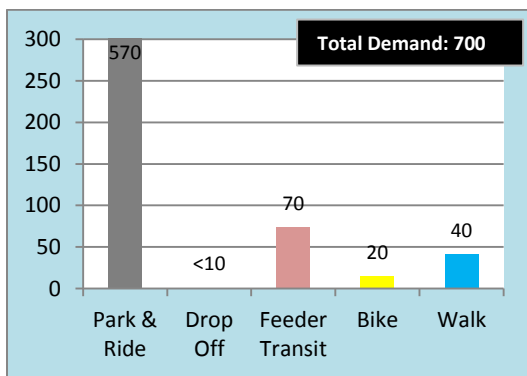


Figure 22: 2030 Metrolink



Lakewood Station

Figures 23 to 25 present future scenarios for Lakewood Station based on the modeling when compared to the Caltrain and Metrolink commuter rail systems.

Figure 23: 2030 Caltrain Interconnectors

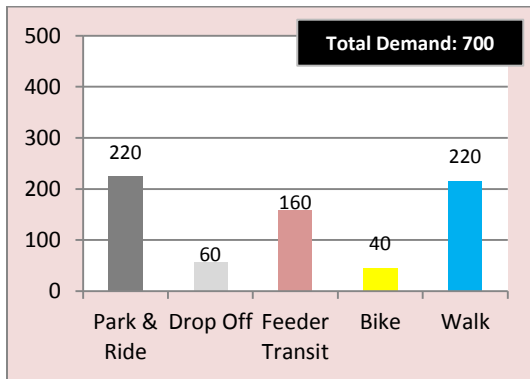


Figure 24: 2030 Caltrain Neighborhood Circulator

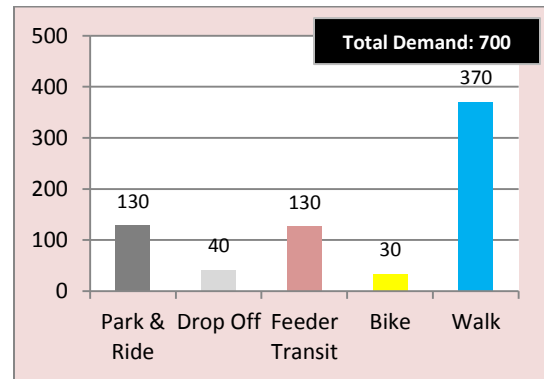
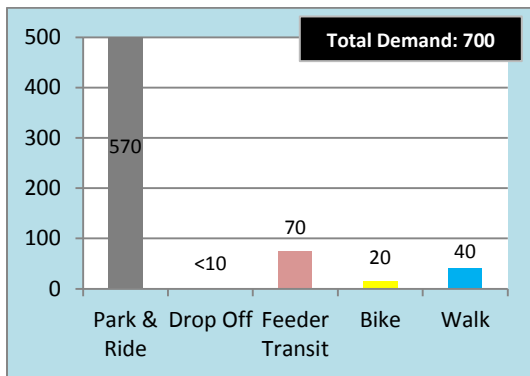


Figure 25: 2030 Metrolink



Appendix K

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